

Transportation Advisory Board



June 13, 2017 at 8:30 a.m.

Public Safety Building,
500 N. Virginia Ave. • Chief Beary Community Rm • Winter
Park, FL 32792

1 administrative

- A. Call to order
- B. Introduction of New Board Alternate Member Tom McMacken
- C. Election of Chair and Vice Chair
- D. Approval of Transportation Advisory Board Minutes from May 9, 2017 board meeting.
- E. Chairman's Report.
- F. Staff's Report.

2 action items

- A. Heritage Trail Support Letter approval – David Erne, Forest Michael

NOTE: Citizen Comments for Action Items (up to 3 minutes per person) will be heard after the second motion for each topic.

3 informational / discussion items

- A. Strategic Planning Sessions for Parking Update – Dori Stone, Director of Planning and Community Development
- B. Vision Zero – Jill Hamilton Buss to lead discussion
- C. Bike Friendly Community Re-application for Higher Designation
- D. Walk Friendly Community Application for Designation
- E. BikeShare – Open Discussion of UCF Grad Students Final Report
- F. Board Orientation on Tuesday, June 27th at 6:00 p.m. Commission Chambers, New Members should attend, Current Members Welcome to attend

4 new business

A. Citizen Comments for general traffic and transportation topics (up to 3 minutes per person). This item is scheduled for 9:30am.

5 adjourn

- A. Agenda requests and/or announcements.**
- B. Review Action Items identified during meeting.**
- C. Next regular meeting, July 11, 2017 at 8:30 a.m. Public Works Building**

appeals & assistance

"If a person decides to appeal any decision made by the Board with respect to any matter considered at such meeting or hearing, he/she will need a record of the proceedings, and that, for such purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based." (F. S. 286.0105).

"Persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Office (407-599-3277) at least 48 hours in advance of the meeting."

**CITY OF WINTER PARK
TRANSPORTATION ADVISORY BOARD
MINUTES**

Regular Meeting
Public Safety Building, 500 N. Virginia Ave.
Chief Raymond E. Beary Community Room

May 9, 2017

Present: David Erne, Tonya Mellen, Jim McFarland, Marc Reicher, Duane Skage

Absent: Harry Barley, Jill Hamilton Buss

City of Winter Park Staff: Dori Stone, Lindsey Hayes, Planning and Community Development; Allison McGillis, Kris Stenger, Vanessa Balta Cook, Building and Sustainability; Butch Margraf, Keith Moore, Public Works Dept.; Lt. Bruce Robinson, WP Police Dept.

Guests: Jody Lazar, Winter Park Library, Forrest Michaels

EXECUTIVE SUMMARY

- Mayflower Trail
- UCF Bike Share Review
- Heritage Trail
- Mobility Plan Sidewalks
- Vision Zero

ADMINISTRATIVE ITEMS

Call to Order: Chm. Erne called the meeting to order at 8:35a.m.

Approval of Minutes:

Chm. Erne asked for approval of the April 11, 2017, minutes. Ms. Mellon moved to approve the minutes as presented, Mr. McFarland seconded the motion. Motion carried unanimously with a vote of 5-0.

Chair's Report – David Erne

Chm Erne announced that Tom McMacken was appointed as alternate to the Transportation Board. He reported that the Bike Five Cities event, held on Saturday, was a big success and provided details as to route and number participants. Mr. Margraf provided details of the individual Winter Park event. He commented that the two types of events allowed riders of all ages and skill levels to participate. Chm. Erne encouraged the Board to read the NACTO (National Association of City Transportation Officials) article he shared. He thanked Ms. Portelli and her students for their presentation on Bike Share.

Staff's Report – Butch Margraf –Project Updates May 9, 2017

- **St. Andrew's Trail** – City staff and Mayor Leary met with Four Seasons Board President on Tuesday, May 2. Attorneys for the City and Four Seasons are drafting an agreement.
- **Ward Park/Project Wellness Trail** – A Greenways and Trails non-motorized trail grant application has been submitted to supplement funding of the project. We have not received any information.

- **17-92 (Orlando Avenue) PD&E update** – PD&E is complete. This project includes widened sidewalks, trees, landscaping, midblock pedestrian refuge crossings, improved stormwater drainage infrastructure. Will be moving project to design. No change.
- **Fairbanks Ave Bowling Alley Property Lane Extension** – Scope of work for the intersection improvements at Fairbanks Ave and 17-92 is complete. FDOT and City are finalizing easement documentation for property transfer. This improvement will extend the westbound lanes approaching 17-92.
- **Denning Drive** – Final stormwater drainage design near completion. Tentative schedule for start of construction is summer June/July. We will begin on the south end between Orange Ave and Fairbanks. No change
- **Active Arterial Management Program (AAM)** –Jim Stroz, P.E., FDOT District Five Traffic Operations Engineer presented the AAM partnership program April 10, 2017 to the City Commission.
- **Interlachen Ave. Pedestrian Crossing Enhancement** – construction of median is 90 percent complete. This project created the pedestrian plaza on the church corner for safely staging to cross Fairbanks Ave. The median narrowed the in and out land widths, realigned the cross walk, completed the brick street to Fairbanks Ave. and will have landscaping in the planting areas. The City is working with Rollins College to construct irrigation to the median.
- **Transit Signal Priority (TSP)** - Equipment issues interrupting start of program have not been resolved. Implementation of program is delayed.
- **Bike Share** – Bike Share presentation by UCF graduate students to TAB at special work session April 25, 2017, Winter Park Health Foundation. Presentation and question and answer session went well.
- **Bicycle Wayfinding Pilot Program** – Pilot program Cady Way to Mead Botanical Gardens is approved. Signs are being stalled for the pilot.
- **Brookshire and Lakemont Elementary School Walking audits** – A student crossing with guard of Greene Drive at Brookshire Ave has been relocated temporarily to Coldstream Drive based on the walk and participant input. Final review and determination will be completed within two weeks.
Rectangular Rapid Flashing Beacons (RRFBs) will be constructed at the Cady Way and Summerfield Road bike path crossings along with upgraded striping. At Lakemont Elementary we are working with OCPS to relocate a fence and widening a sidewalk for better accessibility on the west side of the campus. A funding request has been proposed in the next budget year for a N. Lakemont Ave Complete Streets study.
- **Scenic Boat Tour** - Existing fuel tank to be relocated. Existing power service to be relocated. Ramp in design. Meeting with contractor to plan construction is being scheduled. The Board recommended adding bike racks.
- **Lee Rd Extension** –Lee Road Extension turned over to City.

Mr. Margraf responded to questions.

INFORMATIONAL

Mayflower Trail - Mr. Margraf provided history and information about the Mayflower Trail which was proposed several years ago. He explained the route the trail would follow. In the past the Mayflower did not support creating the trail which would run through the middle their property, but time has pass, people have changed and there is more interest in maintaining an active lifestyle, it may be time to visit the route again. The Board discussed routes and how to proceed to accomplish the goal of creating the

trail. The Board agreed that the next step is to contact the Mayflower and have a conversation on the trail.

Heritage Trail - Mr. Forrest Michael presented a PowerPoint on an east west pedestrian/cyclist/motorist route, he is calling the Heritage Trail. Mr. Michael responded to questions.

Public Comment

Dori Stone, Planning Director, announced that the City will be working with Kimley Horn on a Downtown Parking Strategic Plan. A public meeting is tentative scheduled for June 6, 2017. Additional details, when finalized, will be emailed to Board members.

Bike Share Presentation - Mr. Margraf presented the Bike Share presentation produced by UCF students but any discussion will be postponed until the June meeting when hopefully the full Board is in attendance.

Vision Zero - Tabled until next meeting.

ACTION ITEM - None

Mr. Margraf announced that Kimley Horn will attend the June 13, meeting to present a sidewalk update in the Mobility Plan.

Mr. Margraf announced that he is going to start working on the “Walk Friendly” designation. He will present the letter at the June meeting.

Kris Stenger introduced Vanessa Balta Cook new Sustainability Coordinator.

Lt Bruce Robinson announced that Sgt. Stan Locke, Police liaison, will be replaced by Sgt. Jeff Hershone due to Sgt. Locke’s promotion.

Agenda suggestions for next meeting:

- Walk Friendly designation
- Mayflower Trail
- Heritage Trail
- Bike Share Discussion
- Mobility Plan
- Vision Zero

ADJOURN

Chm. Erne adjourned the meeting at 9:55 a.m. Next meeting is June 13, 2017.

Respectfully submitted,

Debbie Wilkerson

Debbie Wilkerson
Recording Secretary

Project Updates by Staff for June 13, 2017 Transportation Advisory Board Meeting

St Andrews Trail (LAP) – City Mayor and staff presented to Four Seasons Board and 4 Seasons residents on Tuesday June 6th and answered questions concerning the proposed St Andrews Trail.

Ward Park / Project Wellness Trail – A Greenways and Trails non-motorized trail grant application has been submitted to supplement funding of the project. Grant awards to be announced in July.

17-92 (Orlando Avenue) PD&E update – PD&E update is complete. This project includes widened sidewalks, trees, landscaping, midblock pedestrian refuge crossings, improved stormwater drainage infrastructure. Will be moving project to design.

Fairbanks Ave Bowling Alley property Lane Extension – This project is in design. The FDOT and City are finalizing easement documentation for property transfer. This improvement will extend the westbound lanes approaching 1792.

Denning Drive – Final design with stormwater drainage is near complete. Tentative schedule for start of construction is summer June/July. We will begin on the south end between Orange Ave and Fairbanks. MOT Phasing of the Construction Phases are being planned.

Active Arterial Management (AAM) – ongoing partnership between FDOT and the City.

Interlachen Ave Pedestrian Crossing Enhancement – irrigation is being constructed by the City. Upon completion Rollins will plant the median.

Transit Signal Priority (TSP) – equipment issues interrupting start of program have not been resolved. Implementation is delayed. This is an ongoing partnership between FDOT and the City.

Bicycle Wayfinding – Pilot program Cady Way to Mead Botanical Gardens has started. Signs were installed for the pilot. Adjustments to sign information are being made.

Aloma Elementary School Walking audit – The City participates regionally with other agencies to improve walking and biking safety for elementary schools. A walking audit was conducted at Aloma Elementary school on May 19th with Winter Park Public works and Police participation.

Scenic Boat Tour ADA Compliant Access – Second update to the DOJ has been made. Electric ground mounted transformer box is being relocated. Existing fuel tank to be relocated. Existing power service to be relocated. Ramp design is complete. Construction start estimated for first week of July.

Butch Margraf, Traffic Manager, Public Works Department, City of Winter Park Florida
407-599-3411, wmargraf@cityofwinterpark.org

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Butch Margraf, Traffic Manager, Public Works Department, City of Winter Park Florida
407-599-3411, wmargraf@cityofwinterpark.org

Date: May 31, 2017

To: David Erne, Chair, Transportation Advisory Board, City of Winter Park

Copied: Wayne "Butch" Margraf, Public Works Department representative

From: Forest Michael, Michael Planning of Florida, Greenways and Communities
FL LA#0000751

Subject: Letter of Support for the Hannibal Square Stories Walking Tour

This is a request for you to provide a *letter of support* for the proposed Hannibal Stories Walking Tour based upon the presentation provided by Forest Michael to the Transportation Advisory Board, May 9, 2017. Beyond this *letter of support* for the proposed Walking Tour, nothing is asked of the City at this time. This activity is supported by language in the City's Comprehensive Plan Amendment, 2017.

This Hannibal Stories Walking Tour (Walking Tour) is planned to provide a defined walking and bicycling route for the interpretation of the many cultural buildings and places, along existing Hannibal Community streets and sidewalks. The walking tour is planned in the historic heart of the Hannibal Square Community.

The Walking Tour is a statewide initiative initially centered upon a potential grant by the Florida Humanities Council for historic African American communities (1881 Hannibal Square) <https://floridahumanities.org/programs/florida-stories-walking-tours/>. The Walking Tour is a proprietary proposal by this licensed landscape architect, for local residents and visitors and is proposed to include:

1. Five Hannibal Community old and historic churches;
2. One Masonic Lodge circa 1884, the oldest in the city;
3. The Ideal Women's Club and the Mary Lee DePugh site reference;
4. The historic Hannibal School site, and the Hannibal Mural depiction of historic Hannibal;
5. The Martin Luther King Memorial site in MLK, Jr. Park previously approved; and
6. The Hannibal Square Community Heritage Center

Transportation and Mobility: the Walking Tour is planned to connect the SunRail Station along walkways (Existing) with bicycle markings (Future potential). The Walking Tour will provide purposeful and greater connectivity and mobility for residents and visitors throughout the historic Hannibal Square Community, while denoting many historic and cultural resources. It is anticipated in the future that each pedestrian crossing along the route will be provided at least the minimum amount of safety markings and signage by the city to promote greater pedestrian safety. Future markings and street signage will most likely be a future request to the Community Redevelopment Agency.

It is a goal for this facility be used by pedestrians and bicyclists including locals and visitors alike. The date of the physical development of the Walking Tour improvements is flexible and is to be based on available funding and is anticipated to occur in the 2017-2020 range.



End of request (Page 1 of 1)

From: [Jill Hamilton Buss](#)
To: [Wayne \(Butch\) Margraf](#)
Cc: [Rodriguez, Amanda](#)
Subject: Vision Zero Follow up
Date: Tuesday, April 11, 2017 12:26:03 PM
Attachments: [VZ-map-March-12-2017.pdf](#)

Hi Butch,

Please share this background on Vision Zero with the TAB for their consideration. Attached is a map of the current and pending cities that have adopted the campaign.

I want to also be on the record for saying I think that Sgt. Locke and our WPPD are doing an outstanding job. I firmly believe it's ALL of our responsibility – not just police or planning – to make our community safer. Speaking of - we talked about teens and the high school students being part of the problem. I am going to reach out to the WPHS marketing teacher who oversees the “Live. Life. Healthy.” Club to see if we can engage them. I also plan to talk to the principal to enlist his help. I'll let you know how that goes at our next meeting. It takes all of us working together!

Thanks!
Jill

About Vision Zero Network

“Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has proved successful across Europe — and now it’s gaining momentum in major American cities.”

The Vision Zero Network is a collaborative campaign aimed at building the momentum and advancing this game-changing shift toward safe, healthy, equitable mobility for all. Focusing initially on leading-edge cities demonstrating commitment and potential, the Network will bring together local leaders in health, traffic engineering, police enforcement, policy and advocacy to develop and share winning strategies and to support strong, distributed leadership for policies and practices that make Vision Zero a reality.

What makes them different is that they look at preventing injuries instead of collisions. They have shifted from engineering to a public health perspective.

Vision Zero sets a timeline and a commitment and brings stakeholders together to ensure a basic right of safety for all people as they move about their communities.

Vision Zero is a significant departure from the status quo in two major ways:

1. Vision Zero acknowledges that traffic deaths and severe injuries are preventable and sets the goal of eliminating both in a set time frame with clear, measurable strategies.
2. Vision Zero is a multidisciplinary approach, bringing together diverse and necessary

stakeholders to address this complex problem. In the past, meaningful, cross-disciplinary collaboration among local traffic planners and engineers, police officers, policymakers, and public health professionals has not been the norm. Vision Zero acknowledges that there are many factors that contribute to safe mobility -- including roadway design, speeds, enforcement, behaviors, technology, and policies -- and sets clear goals to achieve the shared goal of zero fatalities and severe injuries.

They rely on the implementation of these strategies:

- lowering speed limits
- redesigning streets
- implementing meaningful behavior change campaigns
- enhancing data-driven traffic enforcement

They aim to take action at a local (and state) level to prioritize safety in our policies and practices.

So what makes a Vision Zero City? One that meets the following minimum criteria:

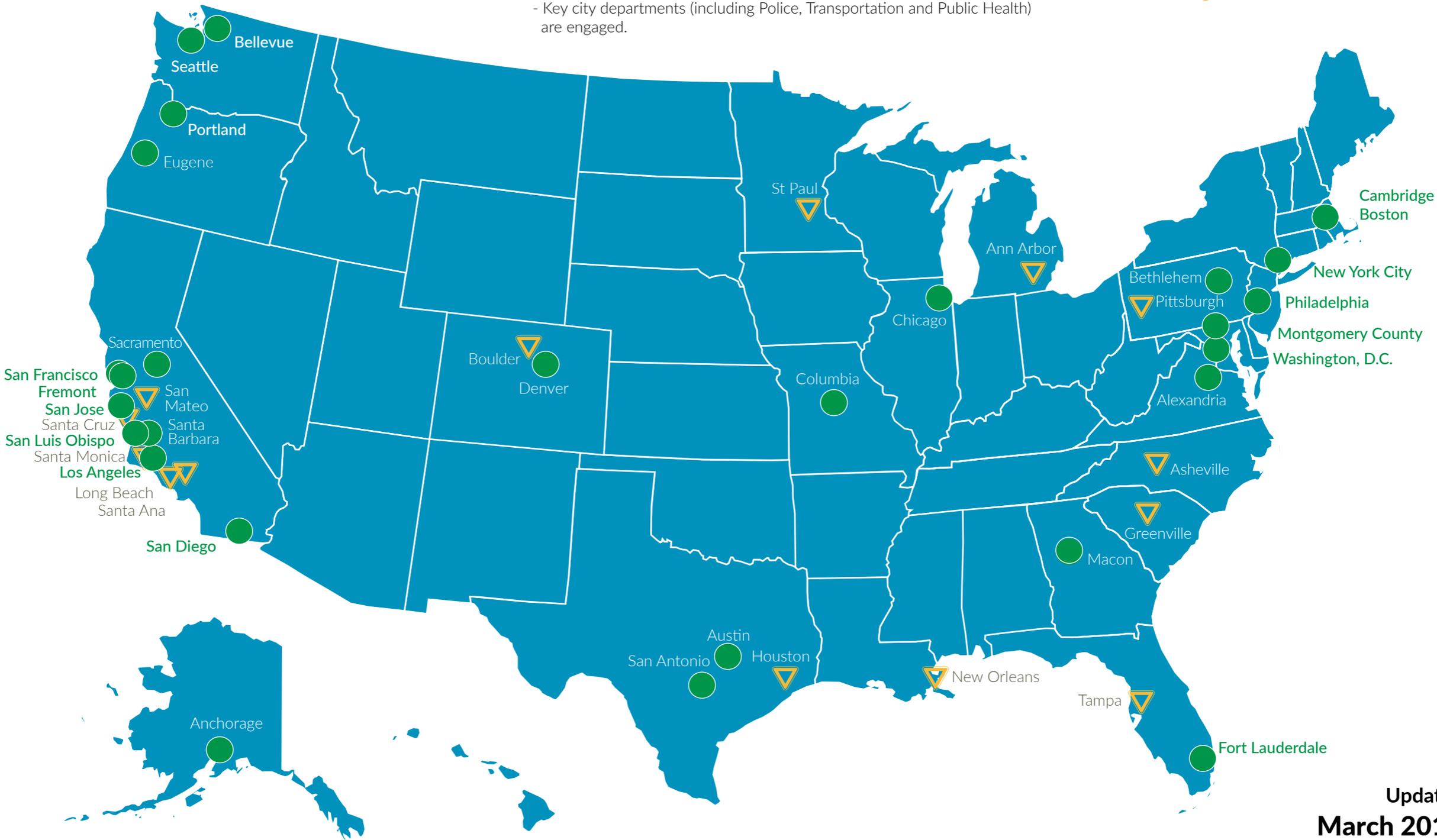
- A clear goal of eliminating traffic fatalities and severe injuries has been set.
- The Mayor has publicly, officially committed to Vision Zero.
- A Vision Zero plan or strategy is in place, or the Mayor has committed to doing so in clear time frame.
- Key city departments (including police, transportation and public health) are engaged.

[Vision Zero Website](#) - Find additional information including case studies of other VZ cities.

Vision Zero Cities

A Vision Zero City meets the following minimum standards:

- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health) are engaged.





BFC_Fall_2015_open Submitted on 2015-08-11 23:01:21

Application Tips

- The application is designed for communities of all sizes. Please note that some questions will not apply to a small rural community or Census Designated Place, for example, but will apply to a large city. The judges will take the size and type of the community into account when making the award decision.
- You can export and print a copy of the draft or final application by logging into your account and clicking on the PDF button next to the application.
- The word limits for open ended questions are just guidelines as the system is actually using a character limit. Ensure that your entered text does not get cut off, even if you stay within the word limit.
- Ensure to log out using the Log Out button. Closing the browser will not log you out completely and will trigger a warning that another user is logged in next time you sign in. If this occurs, and you are certain that no other user is logged in at the same time, you can just disregard the warning and it will disappear within 24 hours.
- If you would like to share any documents such as a bike plan or a bike map with the reviewers, please include a link to the file either under the relevant question or in the last question of each section if there is not enough space. We recommend using a service such as TinyURL (tinyurl.com/) to shorten any long links.
- Please invite cyclists in your community to become local reviewers for your application. Interested cyclists can sign up at bikeleague.org/content/become-local-reviewer. The deadline to sign up is August 16, 2015 midnight Eastern.

Name of Community

Name of Community

Winter Park

County/Borough/Parish

Orange

State

Florida

Has the community applied to the Bicycle Friendly Community program before?

- Yes
 No

If yes, what was the result of the community's last application?

- No designation
 Honorable Mention
 Bronze
 Silver
 Gold
 Platinum

If designated, what year was your community first awarded a Bronze or higher award?

Mayor or top elected official (include title)

Mayor Steve Leary

Phone

407-599-3234

Email

sleary@cityofwinterpark.org

Address

401 Park Avenue South, Winter Park, FL 32789

Community Website

www.cityofwinterpark.org

Link to community map (Google)

<https://www.google.com/maps/@28.6001619,-81.3472889,13z?hl=en>

BFC Contact Profile

Note: This person will receive any future BFC related communication from the League.

Name of BFC contact

Butch Margraf

Title

Traffic Manager

Department

Public Works

Employer

City of Winter Park

Address (No PO Box, please)

401 Park Avenue South

City

Winter Park

State

Florida

Zip

32789

Phone

407-599-3411

Email

wmargraf@cityofwinterpark.org

Is the BFC contact also the Bicycle Program Manager?

- Yes
 No

If no, does your community have a Bicycle Program Manager?

- Yes
 No

If different from above, what is the Bicycle Program Manager's contact information? Please include name, email and phone number.

Does your community have a Safe Routes to Schools Coordinator?

- Yes
 No

If different from above, what is the Safe Routes to Schools Coordinator's contact information? Please include name, email and phone number.

Michelle Sartor, mmsartor@embarqmail.com, 407.644.2300 ext. 241

If different from above, what is the contact information of the Director of your community's Department of Transportation (or equivalent). Please include name, email and phone number.



Troy R. Attaway, P.E., tattaway@cityofwinterpark.org, 407-599-3432

If different from above, what is the applicant name and email?

Community Profile

1. **Type of Jurisdiction.** NOTE: The application will be referring to your type of jurisdiction as "community" throughout the application, which does not include bicycle amenities, services and other resources outside your boundaries.

- Town/City/Municipality
- County/Borough/Parsih
- Metropolitan Planning Organization/Council of Governments
- Regional Planning Organization
- Rural Planning Organization
- Census Designated Place (CDPs are populated areas that lack separate municipal government, but which otherwise physically resemble incorporated places. CDPs are identified by the United States Census Bureau for statistical purposes.)
- Indian Country
- Military Base
- Other

2. **For purposes of comparison, would you describe your community as largely**
suburban

3. **Climate**Average daytime temperature (in °F)

January

62

April

71

July

82

October

75

Average precipitation (in inches)

January

2.2

April

1.5

July

6.9

October

3.8

4. **Size of community (in sq. mi.)**

Total area

10.2

Water area

1.5

Land area

8.7

5. **Total Population**

29203

6. **College/University student population (during semester)**

11-25%

7. **Population Density (Person per sq. mi. of land area)**

3356

8. **Median Household Income**

57545

9. **Age distribution (in percent)**

Under 5

4.3

Age 5-19

17.5

Age 20-64

58.3

Age 65+

19.9

Totals (should equal 100)

100.0

10. **Race (in percent)**

White

86.9

Black or African American

7.6

American Indian and Alaska Native

0.2

Asian

2.3

Native Hawaiian and Other Pacific Islander

0.0

Some other race

1.2

Two or more races

1.8

Totals (should equal 100)

100.0

Hispanic or Latino (of any race)

7.0

11. How many government employees (including the Bicycle Program Manager and the Safe Routes to Schools Coordinator), expressed in full-time



equivalents (FTE), work on bicycle issues in your community? NOTE: A person that spends 1/10 of their time on bicycle issues would be counted as 0.1 FTE.

Several employees spend a portion of their time specifically working on bicycle-related issues, resulting in a FTE equivalent of 1.0 (combination of time spent by Butch Margraf, Keith Moore, Huong Nguyen)

11a. What percentage of the community's Bicycle Program Manager's time is spent on bicycling issues?

51-75%

11b. What percentage of the community's Safe Routes to Schools Coordinator's time is spent on bicycling issues?

- 10% or less
 11-25%
 26-50%
 51-75%
 76-100%
 No Safe Routes To School Coordinator

12. Do you have an officially recognized Bicycle Advisory Committee?

- Yes
 No

12a. How often does it meet?

Monthly or more frequently

12b. How many members serve on the committee?

7 regular members and 1 alternate

12c. Which of the following groups are represented or regularly attend the Bicycle Advisory Committee? Check all that apply.

- Residents
 Law Enforcement
 Chamber of Commerce
 Public Health
 Planning Department
 Transportation Department
 School Board or School System
 Parks Department
 Recreation Department
 Transit Agency
 Other

If other, describe (50 word limit)

Others include City staff representing sustainability and Keep Winter Park Beautiful (KWBPB); reThink (commuter alternatives); Healthy Central Florida, Winter Park Health Foundation

12d. Name and email of Bicycle Advisory Committee Chair

David Erne, daviderne@gmail.com

13. Does your local government have an internal equity, diversity or inclusion initiative, committee or position?

- Yes
 No
 Other

If yes or other, please describe the initiative/committee/position, and provide the name and email address of the primary contact.

We do not have a formal or designated committee for this outlined initiative, however, it is one of our core values and it is part of every employee's annual evaluation

14. List all bicycle advocacy groups in your community

Bike/Walk Central Florida (BWCF), Healthy Central Florida (HCF), Florida Bicycle Association (FBA), reThink, American Bicycling Education Association (ABEA), Winter Park Health Foundation (WPHF), Florida Greenways & Trails Foundation (FGTF)

14a. List all

Bike/Walk Central Florida (BWCF), Healthy Central Florida (HCF), Florida Bicycle Association (FBA), reThink, American Bicycling Education Association (ABEA), Winter Park Health Foundation (WPHF), Florida Greenways & Trails Foundation (FGTF)

14b. List the name and email of the primary contact for each bicycle and transportation equity advocacy group. If a primary contact is the applicant or BFC contact, list an alternative contact.

BWCF - Amanda Day (amanda@bikewalkcentralflorida.org); HCF - Jill Hamilton Buss (JHamiltonBuss@healthycf.org); FBA - Becky Afonso (becky@floridabicycle.org); reThink - Courtney Reynolds (creynolds@transsystems.com); American Bicycling Education Association - Mighk Wilson (mighk@abea.bike); Winter Park Health Foundation - Lisa Portelli (LPortelli@WPHF.ORG); Florida Greenways & Trails Foundation - Dale Allen (wm.dale.allen@gmail.com)

14c. List all advocacy groups that are working with you on this application.

Bike/Walk Central Florida, Winter Park Health Foundation, Healthy Central Florida

15. What are the primary reasons your community has invested in bicycling? Check all that apply.

- Improved quality of life
 Improving public health
 Community connectivity
 Community connectivity
 Provide affordable transportation options
 Reduce car-parking demands
 Climate change/environmental stewardship concerns
 Decrease traffic congestion
 Increase tourism
 Increase property values
 Cooperation with adjacent communities
 Public demand
 Economic development
 Support Smart Growth or other growth management goals (An urban planning and transportation concept that concentrates population growth in compact walkable urban centers. Its goals are to achieve a unique sense of community and place; expand the range of transportation, employment, and housing choices; equitably distribute the costs and benefits of development; preserve and enhance natural and cultural resources; and promote public health.)
 Traffic and bicycle/pedestrian safety
 Meet local or state requirements
 Other

If other, describe (50 word limit)

The City adopted a Sustainability Action Plan on February 9, 2015 that includes a number of bicycle-related actions, including provisions for bike parking, bicycle wayfinding, and incentivizing bicycling in the city.

16. What was your community's most significant achievement for bicycling in the past 12 months? (500 word limit)

The City of Winter Park hosted a regional Bicycle Friendly Community Workshop in February 2015 with support from Bike/Walk Central Florida (BWCF), Healthy Central Florida (HCF), and the Cities of Orlando, Maitland, Casselberry and the town of Eatonville, as well as from the League of American Bicyclists (LAB). The purpose of the workshop was to introduce the concept of bicycle friendly communities to workshop attendees and provide the support the participating municipalities need to become designated as a BFC by the LAB. This was chosen as the City's most significant achievement because what started as an effort to help Eatonville, Maitland and Winter Park become a BFC has quickly expanded into a regional initiative, and Winter Park is playing a key role in the regional coordination, which includes the creation of a



regional family friendly bicycle route map - an action item that came directly from the workshop. Led by Bill Nesper, director of the Bicycle Friendly American Program for the LAB, the workshop attracted more than 60 local changemakers, elected officials, transportation professionals, business leaders and bicyclists from the cities of Casselberry, Lake Mary, Longwood, Maitland, Orlando, and Winter Park, and the counties of Orange, Osceola and Seminole. The attendees included BWCF and HCF partners Florida Department of Transportation (FDOT), MetroPlan Orlando, ReThink Your Commute, Orange County Public Schools and the statewide Florida Bicycle Association. The workshop spawned lively discussions about what it will take to make our streets more inviting for people to bike, whether they are 8 or 80. One of the primary conclusions from the workshop is that the region is looking for resources to be more bike friendly. The staffers that attended were openly seeking guidance, which is lacking locally. The LAB sees Central Florida as an area of opportunity. The workshop also included a community bicycle ride that included a portion within the City of Winter Park. Existing facilities and connections were reviewed during the ride, including the trail connection from Mead Garden to the Orlando Urban Trail, bicycle lanes on Lakemont Avenue, and shared lane markings along Palmer Drive. Opportunities and issues needing to be addressed were also discussed - one highlight was a stop to discuss the potential cycle track project on Cady Way that would provide a connection to Brookshire Elementary School (the project has since been approved and is now under construction). A further follow up action item from the regional BFC workshop is a regional effort for Complete Streets implementation -- this action received the most votes by workshop attendees from Winter Park and was the top overall vote-getter in a voting exercise of top regional actions and priorities related to creating bicycle friendly communities. The regional Complete Streets implementation effort is being led by MetroPlan Orlando and may include outside assistance from the National Complete Streets Coalition. One identified outcome is to develop a Complete Streets project checklist that will make it easier for City staff to appropriately evaluate each project.

17. If you have applied to the BFC program before, describe any improvements that have occurred for cycling in your community since your last application. (500 word limit)

1. Bike racks have been installed at all City public facilities. 2. A bike valet program for downtown events has been implemented. Over 1,100 bikes have been parked since its beginning. 3. The Winter Park Public Library, Winter Park High School, and Rollins College are each running separate bike loan programs. 4. Conducted 6 annual Park To Park police escorted bike rides during March, Florida Bike Month. Have received 6 City Proclamations supporting Florida Bike Month. 5. In 2015 conducted 1st annual police escorted BikeTo Work/Cycling Works bike ride for riders ages 16 years and older. This ride included an after party with bike valet to secure participants bicycles for the purpose of visiting local Park Ave businesses. 6. Pedestrian signalization was completed for pedestrians and cyclists (mostly young school sidewalk cyclists) at all signalized intersections in the City. 7. Shared lane markings have been placed on Palmer Ave (the first location in Central Florida to receive sharrows), S. Lakemont Ave (which also includes Bikes May Use Full Lane signs), Dundee Dr, and Perth Ln. 8. Adopted a Complete Streets Resolution. 9. Bicycle lanes were added to 1.3 miles of US 17-92 / Orlando Ave and to 1.1 miles of SR 426 / Fairbanks Ave between I-4 and Orlando Ave. 10. The City's first bike corral was installed on Lincoln Avenue in front of a downtown bike shop, and took the place of a motor vehicle parallel parking space. 11. The City Commission adopted a Sustainability Action Plan on February 9, 2015 that has several bicycle-related elements, including provisions for bike parking, bicycle wayfinding, and incentivizing bicycling in the city. 12. The City's first cycle track was approved and is now under construction on Cady Way, providing an enhanced bicycle connection to Brookshire Elementary School and the Cady Way Trail. 13. The City approved it's first road diet / right-sizing project on Denning Drive. The project will include family-friendly bicycle enhancements and provide a key connection between the Orlando Urban Trail, Mead Garden, MLK Park, and the Winter Park Village.

18. What was your community's biggest challenge to bicycling in the recent past? How was this issue addressed? (500 word limit)

Funding has and continues to be the biggest issue. Five years ago there was no dedicated line item for pedestrian or bicycle infrastructure, but now a line item "Bicycle and Pedestrian Improvements" for infrastructure has been added to the City budget in the Public Works Department. This budget serves small projects and is shared for both pedestrian and bicycle projects. Large projects are funded through grants and other outside sources, such as through MetroPlan Orlando and the Winter Park Health Foundation. An example of how funding partnerships are helping to get projects completed is the Cady Way Cycle Track project (currently under construction) which was funded by a combination of funds from the Public Works Department, Keep Winter Park Beautiful, and a grant from the Winter Park Health Foundation. A related challenge that remains unsolved due to funding concerns has been creating and funding a full time bicycle/pedestrian coordinator position. Although Winter Park currently uses a combination of several staff positions to fill this role and estimates a 1.0 FTE of combined staffing are actively working on bicycle-related issues, it is desired to increase the FTE above 1.0 by hiring a full time bike/ped coordinator. The City's Pedestrian and Bicycle Advisory Board and Sustainability Advisory Board continue to advocate for this new staff position.

19. What specific improvements do you have planned for bicycling in the next 12 months? (250 word limit)

1. St. Andrews Trail design, a joint recreation and stormwater project. The existing stormwater conveyance ditch would be piped and filled with a 12-foot wide paved path constructed over the filled ditch. This path will connect the existing Cady Way Trail, Ward Park, and the commercial area along Aloma Ave. 2. Implementation of a Bicycle Wayfinding system to connect destinations within the city limits and connect to adjacent municipalities using family friendly routes and existing bicycle facilities. 3. Cady Way Cycle Track construction in the summer of 2015, providing an enhanced connection to Brookshire Elementary School. 4. Identification of locations for additional bike corral parking and implementation. 5. Implement BikeShare program piggybacking the Orlando contract with CycleHop. The downtown Winter Park SunRail station will be implemented as first City station, with future expansion to other locations in the City. 6. Sidewalks programmed for constructed near Brookshire Elementary School on 3 streets (Brechin Drive, Kimbrace Place, and Dunblane Drive) with no sidewalks to help young students walk and ride safely to school. 7. The City's Community Redevelopment Agency (CRA) approved \$613,000 in its FY 2016 budget to "right size" Denning Drive and include bicycle and pedestrian facility enhancements. The proposed concept would change the roadway from 4 lanes undivided to a 3-lane section with a cycle track or shared use path. 8. A trailhead is currently under construction at Mead Garden, which will serve as a connecting point to the Orlando Urban Trail, as well as to the Denning Drive.

Engineering

20. Does your community currently have any of the following policies in place? Check all that apply.

- Local Complete Streets policy (Ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind - including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities. (National Complete Streets Coalition))
- Local bicycle routine accommodation policy (A policy that requires the accommodation of cyclists in all new road construction, reconstruction and resurfacing.)
- Neither

20a. When was it adopted?

May 9, 2011

20b. Provide a link to this legislation or policy

<https://cityofwinterpark.org/docs/government/ordinances-resolutions/2083-11.pdf>

20c. Since the adoption of the legislation or policy, what percentage of the implemented road projects (where bicycle facilities were considered) includes bicycle facilities?

50%. Yes: 1. Bike lanes on Fairbanks Ave between I-4 and Orlando Avenue (US 17/92). 2. Bike lanes striped on Orlando Ave from Nottingham Drive to Canton Ave. 3. Shared lane markings and Bikes May Use Full Lane (BMUFL) signs were installed on South Lakemont Ave connecting existing bicycle lanes on Lakemont Ave in Baldwin Park (Orlando) and Winter Park. No: 1. North Lakemont Ave, 2. Phelps Ave, 3. Lee Road

20d. What tools are in place to ensure policy compliance? Check all that apply.

- Requirement to go through an administrative process if no bicycle/pedestrian facilities are proposed
- Implementation guidance
- Design manual
- Training
- Oversight by Bicycle Coordinator
- Implementation checklist
- None of the above

21. Does your community have bicycle facility selection criteria that increases separation and protection of bicyclists based of levels of motor vehicle speed and volume?

- Yes
- No

If yes, describe (100 word limit)

22. Does your community currently have any of the following additional policies in place? Check all that apply.

- Design manual that meets current AASHTO standards
- Design manual that meets current NACTO standards
- Streetscape design guidelines (Streetscape design guidelines can help create more diverse transportation systems and more accessible communities by improving non-motorized travel conditions and creating more attractive urban environments. (Victoria Transport Policy Institute).)



- Mixed-use zoning
- Form-based/design-based codes (A code based primarily on urban form or urban design, including the relationship of buildings to each other, to streets and to open spaces – rather than being based primarily on land use. (Palo Alto))
- Connectivity policy or standards (Requires transportation planners to establish a certain minimum amount of street intersections per mile, with some exceptions.)
- Policy to preserve abandoned rail corridors for multi-use trails
- Other
- None of the above

23. How do you ensure your engineers and planners accommodate bicyclists according to AASHTO and NACTO standards? (Check all that apply.)

- Offer FHWA/National Highway Institute Training Course
- Hire outside consultants to train staff
- Send staff to bicycle-specific conferences/training
- APBP webinars
- Require project consultants to have bike/ped qualifications
- Adopted a local design manual
- Other
- None of the above

24. Which of the following significant physical barriers to cycling exist in your community? Check all that apply.

- Major highways
- Bridges that are inaccessible or unsafe for cyclists
- Tunnels that are inaccessible or unsafe for cyclists
- Large body of water (e.g. river)
- Roads with bicycle bans
- Railroad corridors
- Other
- No significant physical barriers

25. How do you ensure that there are end-of-trip facilities for bicyclists? Check all that apply.

- Bike parking ordinance for existing buildings specifying amount and location
- Bike parking ordinance for all new developments specifying amount and location
- Ordinance requiring showers and lockers in existing non-residential buildings
- Ordinance requiring showers and lockers in new non-residential buildings
- Building accessibility ordinance (Bicycles are allowed to be parked inside non-residential buildings)
- On-street bike parking/bicycle corrals (On-street bicycle parking, which is clearly differentiated from the roadway through paint, small buffers, flexible bollards or a combination of elements. It generally consists of 6-12 bicycle racks that lie either diagonal or perpendicular to the roadway. (Bike Portland))
- Ordinance that allows bike parking to substitute for car parking
- Requirement for new developments to meet (Certification by the US Green Building Council that a development's location and design meet accepted high levels of environmentally responsible, sustainable standards.)
- Developers are eligible for density bonuses for providing end-of-trip facilities (Allows developments to increase the level of density surpassing the allowable Floor Area Ratio in exchange for amenities needed by the community, e.g. bike parking.)
- Other
- None

26. Do your standards for bicycle parking:

- Conform with APBP guidelines?
- Address the need for parking spaces for cargo bicycles?
- Address the need for facilities to recharge electric assist bicycles?
- No standards

27. What is the total number of public and private bike parking SPACES in your community? NOTE: Please only include usable bicycle parking spaces if a rack has been installed incorrectly, e.g. against a wall.

546 bike parking spaces, both public and private, have been counted - however, this is not a complete inventory, as much of the private bike racks that exist in Winter Park are not specifically tracked.

27a. What percentage of bike racks conform with APBP guidelines?

more than 75%

27b. Of the total bike parking available, please specify the percentage of bike parking spaces that are:

Bike lockers

None

In indoor bike depots (i.e. Bikestation)

None

In bike corrals (on-street bike parking)

1-5%

Suitable for cargo bicycles or bicycles towing trailers

16-30%

Include facilities to recharge electric assist bicycles

None

27c. Approximately what percentage of the following locations has bike racks or storage units? Answer all that apply.

Public and private schools

76-90%

Day care, child care centers and preschools

None

Higher Education Institutions

More than 90%

Libraries

More than 90%

Hospitals and medical centers

None

Transit stations and major bus stops

Less than 10%

Parks & recreation centers

More than 90%

Other government owned buildings and facilities

More than 90%

Event venues (e.g. convention center, movie complex)

More than 90%

Hotels & restaurants

51-75%

Office buildings



More than 90%

Retail stores (excluding grocery stores)

More than 90%

Grocery stores

More than 90%

Multi-family housing

26-50%

Public housing

10-25%

28. Does your community have transit service (bus, light rail, heavy rail)?

Yes

No

28a. Are bikes allowed inside transit vehicles?

Yes

Sometimes

No

If yes or sometimes, describe (50 word limit)

SunRail (commuter rail) allows bicycles inside the cars. LYNX buses allow bikes to be carried on bike racks, but not currently within the buses.

28b. What percentage of buses are equipped with bike racks?

All

29. What is the centerline mileage of the existing off-street bicycle network within your community?

4.8

30. How many miles of the following off-street bicycle accommodations do you have? Answer all that apply (in centerline miles)

Paved shared use paths (?10feet)

2.0

Paved shared use paths (? 8 and

1.4

Natural surface shared use paths (?10feet)

1.4

Singletrack

Other. Please describe (100 word limit)

31. What percentage of the paved shared-use paths that are at least 8 feet wide (in centerline mileage) parallel a road (directly adjacent to or within the right of way)?

42%

32. What type of off-street path crossings of roads with posted speed limits above 25 mph are provided for bicyclists and pedestrians?

Bike/pedestrian overpasses/underpasses

Path crossing with high visibility markings or signs

Raised path crossings

Refuge islands

Other

Not applicable

33. What percentage of all unpaved trails are open to bicyclists?

All

33a. What are the exceptions? (100 word limit)

N/A

34. What is the centerline mileage of your road network (including federal, state and private roads)?

143

35. What is the street network density of your road network? (centerline miles of road per sq. mi. of land area)

More than 15.0

36. What is the centerline mileage of your on-street bikeway network?

7.1 miles of existing signed and marked lanes and routes. Proposed signed and marked lanes and routes are 25.6 miles. Total when completed are 33.2 miles.

37. What percentage of arterial and major collectors have dedicated bicycle facilities that meet AASHTO standards?

23%

38. What percentage of roads has posted speeds of ? 25mph?

37%

38a. On streets with posted speeds of ? 25mph only, how many miles of each of the following bicycle facilities that meet or exceed AASHTO or NACTO standards do you have? Answer all that apply (in centerline miles)

Bike boulevards (not counted under Bicycle Boulevards)

Shared lane markings (not counted under Bicycle Boulevards)

1.73 mi existing; 6.1 is the total when including the roadways proposed for markings

Wide paved shoulders (ridable surface ?4feet and minimum clear path of ?4feet between rumble strips)

Bike lanes (incl. standard,

0 (all types)

Buffered bike lanes

Protected bike lanes (one-way or two-way)

0.44 mi

Raised cycle tracks (one-way or two-way)

39. What percentage of streets has posted speeds of >25mph and ?35mph?

62%

39a. On streets with posted speeds of >25mph and ?35mph only, how many miles of each of the following bicycle facilities that meet or exceed AASHTO or NACTO standards do you have? Answer all that apply (in centerline miles)

Shared lane markings

0.31 mi; total is 2.32 mi including roadways proposed for markings

Wide paved shoulders (ridable surface ?4feet and minimum clear path of ?4feet between rumble strips)

Bike lanes (incl. standard,

Standard bike lanes: 4.6 mi; all other types: 0 mi

Buffered bike lanes

Protected bike lanes (one-way or two-way)



Raised cycle tracks (one-way or two-way)

40. What percentage of streets has posted speeds of >35mph?

1%

40a. On streets with posted speeds of >35mph only, how many miles of each of the following bicycle facilities that meet or exceed AASHTO or NACTO standards do you have? Answer all that apply (in centerline miles)

Wide paved shoulders (ridable surface ?4feet and minimum clear path of ?4feet between rumble strips)

Bike lanes (incl. standard,

Buffered bike lanes

Protected bike lanes (one-way or two-way)

Raised cycle tracks (one-way or two-way)

41. How has your community calmed traffic? Check all that apply.

- Car-free/Car-restricted zones
- Shared Space/Home Zone/Living Street/Woonerf (A street that is designed primarily to accommodate non-vehicular traffic such as pedestrians and cyclists. Such streets also accommodate vehicles, but pedestrian and cyclists take precedence in the design process, which is communicated through signage. Often, there are curves to slow traffic, no curbs, intermittent parking, and trees and recreation areas for pedestrian use. (Living Street Alliance))
- Speed limits 20 mph or less on residential streets
- Physically altered the road layout or appearance to calm traffic speeds
- Road diets (A road diet entails converting a four-lane undivided roadway to a two-lane roadway plus a two-way left turn lane by removing a travel lane in each direction. The remaining roadway width is converted to bike lanes and other uses. This approach is an approved FHWA Proven Safety Countermeasure. (Road Diet Handbook))
- Other
- None

If other, describe (250 word limit)

Bump outs, neighborhood traffic circles, planted medians, narrowed roads, reduced speed limits, raised speed table crossings, and periodic placement of solar powered radar speed confirmation trailers

42. In what other ways have you improved conditions for bicyclists? Check all that apply.

- Bike cut-throughs
- Roundabouts that accommodate bicycles
- Colored bike lanes outside of conflict zones
- Removal of on-street car parking
- Advisory bike lanes (Advisory Bike Lanes give bicyclists priority on narrow roadways. Skip striping is used to show that, unlike a regular bike lane, the "advisory" bike lane may be used by motor vehicles passing each other, provided they yield to bicycles. (Portland))
- Off-street way-finding signage with distance and/or time information
- On-street way-finding signage with distance and/or time information
- Signed bike routes
- Other
- None

43. What percentage of your signalized intersections provides the following accommodations for bicyclists? If there are no signalized intersections, write N/A.

Bicycle signal heads

Green wave for cyclists in some locations

Signals timed for bicycle speeds

Timed signals

100%

Demand activated signals with loop detector (and marking)

28% of signals have loop detectors, but none have bike symbol markings on the pavement over the loops

Video or microwave detection for demand-activated signals

64%

Push-buttons that are accessible from the road

Advance stop line or Bike Box

Colored bike lanes in conflict areas

Refuge islands

Right corner islands (pork chops)

4%

Other, please describe (100 word limit)

44. Has your community ever removed AASHTO-standard bicycle infrastructure?

- Yes
- No
- No AASHTO-standard bicycle infrastructure

If yes, please explain (250 word limit).

45. Which of the following broader transportation policies and programs are in place in your community? Check all that apply.

- Maximum car parking standards (Addresses the problems that an oversupply of parking creates by limiting the number of parking spaces that developers can provide for their projects (Chapel Hill, NC))
- No minimum car parking standards (No minimum parking requirements for any land use.)
- Paid public parking
- Shared-parking allowances (Sharing of parking spaces between building occupancies that have different parking demands depending on the time of day or week, e.g. retail/commercial and residential (South Carolina))
- Congestion charges (A system of surcharging users of a transport network in periods of peak demand to reduce traffic congestion.)
- Prioritization of active mobility in planning and design processes
- Other
- None



46. What maintenance policies or programs ensure the on-street bicycle facilities (including shoulders) remain usable and safe? Select all that apply.

46a. Sweeping

Same time as other travel lanes

46b. Snow and ice clearance

No snow or ice

46c. Pothole maintenance

Within 24 hours of complaint

46d. Describe any other maintenance policies or programs for the on-street bicycle network. (100 word limit)

City website includes a Pedestrian and Bicycle Spot Improvement Program that allows residents and others to alert city staff to needed maintenance and repair issues related to bicycling. Tree limbs are trimmed to maintain a safe height above the roadway. These will be completed on a scheduled road segment basis or by notification to the City by phone, online, or in person.

47. What maintenance policies or programs ensure that off-street bicycle facilities remain usable and safe? Select all that apply.

47a. Sweeping

Monthly

47b. Vegetation maintenance

Monthly

47c. Snow and ice clearance

No snow or ice

47d. Surface repair

Within one week of complaint

47e. Describe any other maintenance policies or programs for the off-street bicycle network, if applicable. (100 word limit)

Tree limbs are trimmed to maintain a safe height above the off-street facilities. Periodic inspections are conducted for debris and pothole damage. Cleaning and repairs are then scheduled to return facilities to a safe usable condition. Monthly sweeping during leaf seasons. Repair pavement as needed.

48. Is there a mechanism in place for cyclists to identify problem areas or hazards to traffic engineers, planners and police? Check all that apply.

- Online reporting
- Hotline
- Monthly meeting
- Other
- None

49. What specific bike infrastructure investments have been made in low-income neighborhoods (as defined by local regulations) and minority neighborhoods? If no low-income or minority neighborhoods, write N/A.

There are no specific programs targeted for low income or minority neighborhoods - all neighborhoods are treated the same. However, there have been several bicycle-related improvements made in lower income and/or minority neighborhoods such as bike racks placed at the Winter Park Community Center, the park at Capen and New England, and MLK Park, as well as a multi-use trail within MLK Park

50. What specific bike infrastructure investments have been made around schools? If no schools, write N/A.

1. Cady Way Cycle Track at Brookshire Elementary school (currently under construction); 2. Facility directional signs for Winter Park High School 3. Bike parking at all schools, including new racks installed during the recent Brookshire Elementary School renovation 4. 2400 feet of new sidewalk near Brookshire Elementary school for young bike riders paid by SRTS program. 5. Brookshire Elementary PTA is adding a waiting area for parents picking up bike/ped students. It will help contain parents and direct bike/ped students as they exit campus, improving safety. The waiting area will be located at the front of the school near their marquee, between Greene Dr and the bus loop. Benches, pavers and planters will add appeal. The project is being funded through the sale of pavers.

51. Describe any other amenities or infrastructure improvements that your community provides or requires that create a comfortable and attractive bicycling environment. (500 word limit)

The City has a strong tree ordinance to ensure the City's abundant tree canopy is maintained, which results in heavily shaded streets - a significant amenity for bicyclists riding through neighborhoods. The City has been declared a "Tree City USA" and the City's urban forest consists of more than 75,000 trees on private and public property, with over 25,000 of those trees in City rights of way. These trees are maintained through the City's Urban Forestry Division and its Urban Forestry Management Plan. The City also has a Tree Preservation Board that helps to encourage the proliferation and preservation of trees throughout the City.

Education

52. What percentage of your public and private elementary schools offer regular bicycle education?

26-50%

52a. Which type of bicycle education is offered to elementary students? Check all that apply.

- Bicycle education is a routine part of the PE curriculum
- Bicycle rodeo(s)
- Bicycle safety presentation
- Bicycle-related after-school program
- Bicycle summer camp
- Other

If other, please describe (250 word limit)

Brookshire Elementary School has historically held a "How to Ride on the Trail" training, particularly aimed at students that use the Cady Way Trail to bike to school.

53. What percentage of your public and private middle schools offer regular bicycle education?

Not applicable

53a. Which type of bicycle education is offered to middle school students? Check all that apply.

- Bicycle education is a routine part of the PE curriculum
- Bicycle rodeo(s)
- Bicycle safety presentation
- Bicycle-related after-school program
- Bicycle summer camp
- Other

54. What percentage of your public and private high schools offer regular bicycle education?

None

54a. Which type of bicycle education is offered to high school students? Check all that apply.

- Bicycle education is a routine part of the PE curriculum
- Bicycle safety is taught as part of the driver education curriculum
- Bicycle safety presentation
- Bicycle-related after-school program
- Bicycle summer camp
- Other

If other, please describe (250 word limit)

At Winter Park High School, a bike loan program debuted at the school's Live. Life. Healthy (LLH) Health Fair on September 24, 2014. LLH is a student created and led initiative, founded and supported with grant funding from the Winter Park Health Foundation, to encourage all students to eat healthier and be more active. A grant from the Florida Dairy Council's Fuel Up to Play 60 (FUTP60) program enabled LLH to purchase 8 bicycles, kickstands, and water bottle cages for the program (and one beach cruiser was donated as well as bike helmets for riders). To supplement the new program, WPHS has also launched a Bike for Life Club which is sponsored by a teacher, Matt Johnson, who is an avid cyclist. In addition, the LLH Health Fair will include a table with information about bike safety, and LLH has also held a Bike Rally (a scavenger hunt on bikes).

55. Are bicycles provided to low-income students by the school district, police, non-profit or other entity to allow every student to participate in hands-on



bicycle education instructions?

- Yes
 No

If yes, please describe (including funding source, if known).

First United Methodist Church (FUMC) has a Bicycle Blessings ministry. They receive requests from school counselors and organizations throughout the year with requests for bicycles for children who are in need. Through generous donations from the FUMC faith community and also from several school and community connections, the gently used bicycle stock is continually replenished with the refurbished bikes provided based on requests received.

56. Outside of schools, how are children taught safe cycling skills? Check all that apply.

- Learn to ride classes
 Bike clinics or rodeos (Teaches children the skills to ride their bicycle safely in a fun and non-competitive environment, includes instruction on how to properly fit a helmet.)
 ABCs of Family Biking, family bike show-and-tell, or similar program focused on families with toddlers and young children
 Youth bike clubs
 Youth development road or cross racing teams
 Youth development mountain bike racing teams
 Helmet fit seminars
 Safety town area (A program for children that teaches safety lessons about bicycles, traffic and other similar topics. The program can be held at a school or a permanent "safety town" facility.)
 Trail riding classes
 Other
 None of the above

If other, describe (250 word limit)

Beginning this year, the City is moving its annual Park to Park Ride (which has traditionally been held in March) to the fall and will be specifically targeted to families with activities to include a bicycle rodeo and helmet fittings. Although not an annual event, the City has periodically hosted bike rodeos for the public, with three such events held since the last BFC application was submitted in 2008. The City and the Pedestrian and Bicycle Advisory Board hope to make this an annual event.

57. How many times per year are the following adult bicycling education classes held within your community? Answer all that apply.

Traffic Skills 101 classes or equivalent (full-day training course, including classroom and on-bike instruction)

Cycling Skills classes (three to four hour classroom training courses)

1 - Winter Park Public Library proposing cycling course for seniors (55+) Oct. 8, to be run by reThink

Commuter classes (one to two hour classes)

2 - Cycling Savvy Light held at Valencia College (for employees), 9/30/14 & 4/9/15

Bicycle maintenance classes or workshops

24 - Performance Bicycle Shop offers 2 bike maintenance classes per month

57a. Do any of the above classes specifically target:

- Women
 Seniors
 Families with toddlers and young children
 Non-English speakers
 Minorities/People of Color
 Low-income populations (as defined by local regulations)
 University students
 LGBTQIA
 ADA community
 Homeless community

57b. If there are bicycle education classes targeting Non-English speakers, please list the language(s) that the course and materials are provided in.

N/A

58. Is the bicycle education curriculum taught in your community accredited by the League of American Bicyclists? Learn more about the accreditation at bikeleague.org/content/accreditation-program.

- Yes
 No

59. Do you provide any of the following educational materials published by the League of American Bicyclists to community residents and/or businesses?

- Smart Cycling Quick Guide
 Smart Cycling Student Manual
 Smart Cycling Education videos
 Other

60. Do you offer regular bicycle skills courses for your transportation engineers and planners that include on-bike instruction and in-traffic cycling?

No

61. Has your community hosted a League Cycling Instructor seminar in the past two years?

No

62. How many League Cycling Instructors are there in your community? Tip: Enter your community name under "Connect Locally" at bikeleague.org. Then click "Find League Cycling Instructors in the top right corner of the map to see a list of active instructors.

1 - Jamie Krzeminski (LCI #1279)

62a. List League Cycling Instructors that have taught at least one class during the past 12 months. (250 word limit)

N/A

62b. Are there any other active bicycle safety instructors that are not affiliated with the League of American Bicyclists? Please list their names and affiliation.

The Cycling Savvy program includes numerous certified instructors in the Orlando metro area. While there are no Cycling Savvy instructors that are Winter Park residents, Orlando-area instructors often teach classes across various municipal boundaries. For example, Courtney Reynolds (CSI, Orlando, FL) has taught classes at Valencia College in Winter Park, and is currently working on other potential courses, including a planned course focused on 55+ seniors that would be held in conjunction with the Winter Park Public Library and reThink.

63. Do you have a ticket diversion program? Check all that apply.

- For motorists
 For cyclists
 No

64. What have you done in the last 18 months to educate motorists and bicyclists on sharing the road safely? Check all that apply.

- Public service announcements
 Share the Road educational videos on community website/TV channel
 Community newsletter/magazine article
 Information in new resident packet
 Information for students and parents from the school system
 Utility bill insert
 Flyer/handout
 Info sessions/lunch seminars
 Bicycle ambassador program (Bicycle Ambassadors promote safe cycling through community organizing, education and outreach. (Transportation Alternatives))



- Newspaper column/blog on bicycling
- Dedicated bike page on community website
- Billboards
- Share the Road Signs
- Share the Road information in driver's education
- Other
- None of the above

If other, describe (250 word limit)

As part of the FDOT Pedestrian and Bicycle Safety High Visibility Enforcement (PBSHVE) campaign which began in April 2014, the Winter Park Police Department has been implementing proven techniques to enhance pedestrian and bicycle safety and provide safe walking and bicycling environments. The methods used have included the distribution of educational materials to motorists, pedestrians and bicyclists - improving their knowledge of traffic laws and methods of safe walking, presentations to school age children, use of social networking, and targeted enforcement of violators including "Targeted Crosswalk Enforcement" by using plain clothed officers to identify careless drivers who disregard the safety of pedestrians in crosswalks. Specific outreach activities have included participation in an Earth Day event; MLK Day Pedestrian/Bicyclist Safety event; school age programs at Alpha Christian Academy, Winter Park Daycare, Kiddie Haven Daycare, Brookshire Elementary School, and the All Saints Trike-a-thon event; press releases, TV/radio public service announcements, and newspaper and online print articles (Orlando Sentinel, WDBO 96.5 FM).

65. Which of the following groups of professional drivers have training that includes information on sharing the road with cyclists? Check all that apply.

- Local government staff
- Taxi drivers
- Transit operators
- School bus operators
- Delivery drivers
- Other
- None of the above

If other, describe (100 word limit)

Winter Park Police

66. Describe any other education efforts in your community that promote safe cycling. (500 word limit)

Staff staff at three elementary schools (Aloma ES, Brookshire ES and Lakemont ES) attended a certification workshop for helmet fitting and student bike safety education. reThink has offered Cycling Savvy Light classes to employees at Valencia College, but will be expanding this year to others in the City of Winter Park. This will likely be modeled on similar classes that have been offered in the Orlando metro area in the past, targeted to employers/employees to encourage bicycling as a legitimate commuting option and provide guidance on safe cycling practices. reThink is also proposing to do a similar class oriented to seniors at the Winter Park Public Library on Oct. 8 based on interest expressed from the library. The First Congregational Church of Winter Park Weekday Preschool and Kindergarten and its Parent Involvement Association host the school's annual Bike Fest each February, an event that has been held for more than 20 years. Activities include a safety discussion from the Winter Park Police Dept, a bike inspection station, repair station, a free ride area and an obstacle course.

Encouragement

67. Do you have a community-wide trip reduction ordinance or programs?

- Yes
- No

If yes, describe the ordinance/program and the results, and include a link if available. (250 word limit)

The City of Winter Park Comprehensive Plan Chapter 2 Transportation Element Goals, Objectives, and Policies includes policies designed to reduce trips through land use, demand management, partnering with major institutions supporting trip reduction programs, alternative transportation modes, and supporting transit.

67a. Does your trip reduction program use individualized marketing similar to the Portland, OR SmartTrips program to identify and support current and potential bike commuters in your community?

- Yes
- No

If yes, describe the program and the results. (250 word limit)

N/A

68. What mapping and route finding information is available for your community, which has been updated in the last 18 months? Check all that apply.

- Web-based route finding service
- Smart phone app
- Printed/digital bicycle network map
- Printed/digital mountain bike trails map
- Printed/digital greenways and trails map
- Printed/digital Safe Routes to Schools map(s)
- None of the above

69. How do you promote National Bike Month/your own dedicated Bike Month? Check all that apply.

- Official Proclamation
- Community-wide Bike to Work Day/Week
- Bike to School Day/Week
- Bike to Church Day or similar
- Community Rides
- Mayor-led/Council-led Ride
- Public Service Announcements
- Videos promoting bicycling on community website/TV channel
- Publish a guide to Bike Month Events
- Bike Month Website
- Commuter Challenge
- Challenges aimed at students biking to school
- Non-commuting related (i.e. errand-running) challenges and programs
- National Bike Challenge
- Bike Commuter energizer stations/breakfasts
- Car-free days (A Car Free Day encourages motorists to give up their car for a day. September 22 is World Car Free Day.)
- CycloFemme Ride
- Kidical Mass Ride
- Open Streets/Ciclovía/Sunday Parkways (Temporary event, which closes a street or area to cars for use by pedestrians and cyclists.)
- Mentoring program for new riders
- Bike valet parking at events
- Bicycle-themed festival/parade/show
- Public education campaign relating to cycling (e.g. with a focus on public health or environmental benefits)
- Trail construction or maintenance day
- Other
- No promotion



69a. How many Open Streets/Ciclovía/Sunday Parkways events were held in 2014?

69b. How many residents participated in the following events in 2014. Write 'N/A' if no such event occurred in your community. Write 'No Data' if participation numbers are unknown.

Bike to Work Day(s)

64

Bike to School Day(s)

196

Open Streets/Ciclovía/Sunday Parkways

N/A

70. How do you promote bicycling outside of your official Bike Month? Check all that apply.

- Community and charity rides
- Mayor-led/Council-led Rides
- Videos on bicycling on community website/TV channel
- Public Service Announcements
- Trail construction or maintenance day
- Kidical Mass Ride
- Open Streets/Ciclovía/Sunday Parkways (Temporary event, which closes a street or area to cars for use by pedestrians and cyclists.)
- Commuter Challenge
- Non-commuting related (i.e. errand-running) challenges and programs
- Challenges aimed at students biking to school
- National Bike Challenge
- Business program that provides discounts for customers arriving by bicycle
- Triathlons and bicycle races
- Bike commuter events
- Car-free days (A Car Free Day encourages motorists to give up their car for a day. September 22 is World Car Free Day.)
- Publish a guide to community bicycle events
- Mentoring program for new riders
- Bike valet parking at events
- International Bike to School Day in October
- Bicycle-themed festivals/parades/shows
- Public education campaign relating to cycling (e.g. with a focus on public health or environmental benefits)
- Community celebration/ride each time a bicycle project is completed
- Other
- No promotion

71. List all public cycling events that occur annually in your community. (500 word limit)

Bike To Work Day 2015; Park To Park Annual ride 2009-2014; National Bike to School Day; International Walk/Bike to School Day; Annual Bicycle Parade at the Olde Fashioned Fourth of July celebration

72. Are any bicycle events specifically marketed to one or more of the following?

- Women
- Seniors
- Families with toddlers and young children
- Non-English speakers
- Minorities/People of Color
- Low-income populations (as defined by local regulations)
- LGBTQIA
- ADA community
- Homeless community

73. How does the municipality sponsor or actively support bicycle events?

- Organize the event
- Fund event
- Contribute in-kind funding (i.e. police presence, closing roads, etc)
- Assist in promoting the event
- Other
- No support/ Not applicable

74. Does your local tourism board or chamber of commerce promote bicycling in your area?

- Yes
- No

If yes, describe (100 word limit)

The Chamber supported the December Commuter Challenge which encouraged Winter Park employees to commute by means other than private auto (including bicycling) to free up parking spaces in the Park Avenue area in the Christmas shopping season. The Chamber also participated in the Bike to Work event held this March which promoted Park Avenue businesses. They also help distribute a map guide to active fun in the City and adjacent municipalities to residents and visitors - this map locates walking and cycling routes, parks, and activity locations.

75. Are there cycling clubs in your community? Check all that apply.

- Recreational bike clubs
- Mountain bike clubs
- Friends of the Trail groups
- National Mountain Bike Patrol
- Racing clubs or teams
- Kidical Mass, Family Bike Party, or other family-oriented groups
- Other
- No

75a. List the names of the clubs.

Florida Freewheelers; Orlando Runners & Riders; Orlando Racing Club; The Leukemia & Lymphoma Society (Team in Training); Central Florida Bike Club. There are also numerous other informal groups that have organized rides and activities that start, end, or pass through Winter Park.

76. Which of these bicycling amenities do you have in your community? Check all that apply.

- BMX track (BMX tracks are constructed out of dirt with various corners and jumps that are designed to be challenging while taking account of riders' safety.)
- Velodrome (Arena for indoor or outdoor track cycling)
- Cyclocross course (A course featuring a variety of surfaces (pavement, grass, sand, gravel, dirt, etc.) and a number of obstacles that require users to dismount and remount their bicycle.)
- Mountain bike park
- Pump tracks (A pump track is a continuous loop that can be ridden on a bike without pedaling. Tracks consist of a series of rolling bumps and banked corners that



allow the rider to gain momentum and reach speeds of up to 20mph. (Bikes and Berms))

- Bicycle-accessible skate park
 Loop route(s) around the community
 Other
 None

If other, describe (100 word limit)

The City of Winter Park is well-networked with low volume residential streets suitable for safe cycling, and is currently working with a consultant to design a signed wayfinding system for cyclists. In addition, Healthy Central Florida publishes a Guide to Active Fun map that shows mapped routes throughout the community.

77. Does your community currently have a bike sharing program that is open to the general public (excluding private bike sharing systems limited to employees of a certain business)?

- Yes
 No
 Launching this year

If yes or launching this year, please provide details about the system below.

77a. What type of system is your bike sharing program?

- Automated kiosk-style bike share system
 GPS-enabled bike share system
 Short-term bike rentals
 Long-term bike rentals
 Bike library (free rentals)
 Unregulated program (i.e. Yellow Bike)
 Other

If other, please describe. (100 word limit)

The Winter Park Public Library, Rollins College, and Winter Park High School all have existing bike loan/share programs. The City of Winter Park has finalized a piggyback contract to implement bike share this year. Bike share will be provided by Juice Bike Share, which started locally in Orlando in January 2015. Confirmed station locations in Winter Park include the Winter Park SunRail station and Valencia College. Other locations such as Rollins College and Winter Park Village have shown interest in also hosting bike share stations.

77b. How many bikes are in the system?

WPPL has 8 bikes, Rollins has 12, WPHS has 9. Juice Bike Share expansion into Winter Park: 14 bikes will be available in the initial phase (10 at Winter Park SunRail, and 4 at Valencia College) , with potential expansion to other sites in Winter Park

77c. How many stations are in the system?

WPPL, Rollins, and WPHS each have 1 station for their bike loan programs. Juice Bike Share expansion into Winter Park: 2 stations initially (Winter Park SunRail station and Valencia College), with potential expansion to other sites in Winter Park

77d. How many trips are being made annually?

The Winter Park Public Library bike loan usage was 177 trips in the last 12 months. Juice Bike Share in Orlando has more than 1,500 members and has resulted in 5,000+ miles of usage in 2015, even though the system with 20 stations and 200 bikes was not fully implemented until May 1.

77e. Are there options for transporting children as passengers?

- Yes
 No

78. Do you have any current League of American Bicyclists designated Bicycle Friendly Businesses in your community?

- Yes
 No

If yes, list the names of the businesses and their award level. (250 word limit)

There are no Bicycle Friendly Businesses within the City boundaries currently. However, Bikes, Beans, and Bordeaux (a silver level BFB) is located 0.1 mile outside the Winter Park city limits.

78a. Do you have a local Bicycle Friendly Business program?

- Yes
 No

If yes, please share a link to the program page and a list of certified businesses.

78b. Do you have a Bicycle Friendly Business district?

- Yes
 No

If yes, describe (250 word limit)

79. Are there any institutions of higher education in your community?

- Yes
 No

79a. If yes, please list their names. NOTE: If more than ten institutions, please list the largest five.

Rollins College, Valencia College, Winter Park Tech

79b. If yes, are you partnering with your local institutions of higher education on bicycle related programming? Please describe. (250 word limit)

Yes, reThink has completed two Cycling Savvy Lite classes at Valencia College, targeted at employees. Looking to expand offerings to students.

79c. If yes, are there any community bicycle programs or campaigns (e.g. enforcement, education, encouragement) targeting college or university students? Please describe. (250 word limit)

The Rollins College bike loan program encourages cycling among its students, who are able to check out bikes at no cost for up to 3 days at a time. There have not been organized bike safety education courses targeting college students in Winter Park to date, although potential expansion of Cycling Savvy to college students is being evaluated.

79d. If yes, do you have any current League of American Bicyclists designated Bicycle Friendly Universities in your community?

- Yes
 No

If yes, list the names of the institutions and their award level.

80. How many for-profit specialty bicycle retailers (shops dedicated primarily to selling bikes and bike-related equipment) are there in your community?

2 within the City limits, and 2 others just outside the City limits (within 0.1 mi of the boundary)

80a. List their names.

Performance Bicycle Shop; Breakaway Bicycles; Winter Park Cycles (0.1 mi outside Winter Park city limits); Ace Metric (0.06 mi outside Winter Park city limits)

81. Does your community have a bike co-op or non-profit community bike shop?

- Yes
 No

If yes, describe its services (250 word limit)

First United Methodist Church (FUMC) has a Bicycle Blessings ministry. They receive requests from school counselors and organizations throughout the year with requests for bicycles for children who are in need. Through generous donations from the FUMC faith community and also from several school and community connections, the gently used bicycle stock is continually replenished with the refurbished bikes provided based on requests received.

81a. If yes, does the co-op/non-profit community bike shop receive support from the local government?

- Grants



- Free or subsidized property/space for a duration of at least 5 years
- Contracts for services, e.g. bicycle skills or maintenance education, event support, etc
- Free bicycle safety accessories for distribution, e.g. helmets or lights
- Provision of abandoned or impounded bicycles for resale
- Free PSA or advertizing space
- Other

If the local government provides grants and/or free/subsidized property/space to the co-op/non-profit community bike shop, please list the annual value for each (in Dollar).

N/A

82. Does your community have youth recreation and/or intervention programs centered on bicycling? Check all that apply.

- Trips for Kids chapter
- Earn a Bike program (Completing hands-on lessons in bike mechanics and bike safety, participants in an Earn-a-Bike Program earn credits towards a bike and a helmet.)
- Create a Commuter program (The Create a Commuter program provides basic bicycle safety education and fully-outfitted commuter bicycles to low-income adults striving to connect to work or workforce development by bicycle.)
- Other
- None

83. Describe any other programs or policies your community has to encourage cycling. (500 word limit)

The City of Winter Park has installed and continues to increase the number of bicycle parking spaces/racks throughout the City that provide cyclists secure short term parking. The bike parking is provided in parks, at recreation centers, at City facilities open to the public and City employees, and near downtown businesses. The City also operates a Bike Valet service with volunteers during downtown special events. The bike parking and valet are provided to encourage more residents and visitors to ride their bikes, get out of sometimes dense vehicular traffic, and avoid parking problems. A Walk & Bike to School Workshop for parents and school staff is held annually at the beginning of the school year. SRTS related materials are presented and a panel of local experts consisting of school administration, law enforcement, public works staff, PE staff and PTA committee leaders address attendee questions an concerns. Mini-grant funds are available to support an active commute to school. All 3 public elementary schools were awarded mini-grants as well as the middle schools these students will attend.

Enforcement

84. How does your police department interact with the local cycling community? Check all that apply.

- A police officer is an active member of the bicycle advisory committee
- Identified law-enforcement point person to interact with cyclists
- Identified law-enforcement point person to Safe Routes to Schools program
- No current formal interaction
- Other

If other, describe (100 word limit)

See Question 83 (Annual Walk & Bike to School Workshop). A member of the Winter Park Police Department attends the monthly Winter Park Pedestrian and Bicycle Advisory Board, as well as the Community Traffic Safety Team (CTST) meetings.

85. What kind of training is offered to police officers relating to bicyclists? Check all that apply.

- Basic academy training
- International Police Mountain Bike Association training
- Law Enforcement Bicycle Association training
- National Highway Traffic Safety Administration Law Enforcement Training
- Completion of Smart Cycling course by one or more officers
- Presentation by League Cycling Instructor or local cyclist
- Institute for Police Training and Development bicycle training
- Training on racial profiling awareness in multimodal transportation enforcement
- Training on bicycle crash types, numbers and locations
- Other
- No training offered

If other, please describe (100 word limit)

1) Officers that wish to obtain Patrol Bicycle training and certification are permitted to attend a 40 hour police bike school. 2) Our Community Service Division conducts bicycle safety classes and bike rodeos to promote bicycle safety. 3) Each Officer approved to work the FDOT Pedestrian and Bicycle Safety High Visibility Enforcement campaign reviews and completes "NHTSA Enhancing Bicycle Safety: Law Enforcement's Role" training materials created by NHTSA. This training equips officers with the ability to recognize motorist and bicyclist behaviors that contribute to bicycle collisions, and effective techniques to deter such behavior.

86. What enforcement programs that target improving cyclist safety are in place? Check all that apply.

- Helmet giveaways
- Light giveaways
- Bike lock giveaways
- Targeting motorist infractions most likely to lead to crashes, injuries and fatalities among bicyclists
- Targeting cyclist infractions most likely to cause property damage, crashes, injuries and fatalities to themselves and others
- Positive enforcement ticketing (Cyclists "caught" engaging in positive behaviors, e.g. practicing personal safety or following traffic laws, are issued "tickets" – vouchers redeemable for recreational activities or food.)
- Share the road campaigns
- Road safety campaigns targeting areas around schools
- Other
- None of the above

How many citations have been given to motorists in 2014?

5,810

How many citations have been given to cyclists in 2014?

38

If other, describe (100 word limit)

87. What percentage of patrol officers are regularly on bikes?

None

88. Are any other public safety (e.g. EMS) employees regularly on bikes?

- Yes
- No

If yes, describe (50 word limit)

The City Fire Department has two EMS cyclists that work special events with street closures.

89. Do police officers report cyclist crash data?

Yes

90. Do police officers report potential hazards to traffic engineers and planners to identify sites in need of safety improvements for cyclists?

- Yes
- No



91. Which of the following safety services and amenities are available in your community?

- Emergency call boxes/phones along trails
- Trail watch programs/ Trail patrols
- Street lighting on most arterials
- Street lighting on most non-arterials
- Lighting of most shared-use paths
- Stolen or impounded bikes recovery system or assistance
- Non-mandatory bike registration
- None of the above

92. Are there any local ordinances or state laws that protect cyclists? TIP: You can learn about your state's laws that protect bicyclists at bikeleague.org/StateBikeLaws. Check all that apply.

- Specific penalties for failing to yield to a cyclist when turning
- It is illegal to park or drive in a bike lane (intersections excepted)
- Penalties for motor vehicle users that 'door' cyclists
- Ban on cell phone use while driving
- Ban on texting while driving
- Vulnerable road user law
- Safe passing distance law
- It is illegal to harass a cyclist
- Photo enforcement for red lights and/or speed
- Other
- None of the above

93. Do your local ordinances place any restrictions on cyclists? Check all that apply.

- Local law requires cyclists to use side paths regardless of their usability
- Local law requires cyclists to use bike lanes when provided
- Local law requires that cyclists are required to ride as far to the right of the road as practicable without exceptions
- Local law restricts usage of electric-assist bicycles
- Mandatory bike registration
- Restrictions on sidewalk riding outside of the Central Business District
- Restrictions on sidewalk riding inside the Central Business District
- Local or school policies restrict youths from riding to school
- Other
- None of the above

If there is a restriction on electric assist bikes, describe (100 word limit)

If local law prohibits cycling on sidewalks, are children exempted?

- Yes
- No

If other, describe (100 word limit)

94. Do you work with neighboring local jurisdictions on making your local bike laws consistent across municipal boundaries?

- Yes
- No

95. Describe any other enforcement programs or policies relating to cycling. (500 word limit)

As part of the FDOT Pedestrian and Bicycle Safety High Visibility Enforcement (PBSHVE) campaign which began in April 2014, the Winter Park Police Department has been implementing proven techniques to enhance pedestrian and bicycle safety and provide safe walking and bicycling environments. The methods used have included the distribution of educational materials to motorists, pedestrians and bicyclists - improving their knowledge of traffic laws and methods of safe walking, presentations to school age children, use of social networking, and targeted enforcement of violators including "Targeted Crosswalk Enforcement" by using plain clothed officers to identify careless drivers who disregard the safety of pedestrians in crosswalks. Specific outreach activities have included participation in an Earth Day event; MLK Day Pedestrian/Bicyclist Safety event; school age programs at Alpha Christian Academy, Winter Park Daycare, Kiddie Haven Daycare, Brookshire Elementary School, and the All Saints Trike-a-thon event; press releases, TV/radio public service announcements, and newspaper and online print articles (Orlando Sentinel, WDBO 96.5 FM).

Evaluation and Planning

96. Does your community have a comprehensive bicycle master plan or similar section in another document?

Yes

If yes, please provide details about the plan below.

96a. Provide a link to the plan or describe. (250 word limit)

The City has a Pedestrian and Bicycle Connectivity Plan. This plan was previously known as the Circulation Plan and first adopted in July 2010 by the Pedestrian and Bicycle Advisory Board. It was adopted by the City Commission as part of the Long Range Transportation Plan in February 2011. The Connectivity Plan was updated and adopted in 2013. Link to the plan: <http://cityofwinterpark.org/docs/residents/cycling-walking/2010-pedestrian-bicycle-circulation-plan.pdf>

96b. When was it passed or most recently updated?

2013

96c. How has the community staff reached out to minority and low-income communities (as defined by local regulations) to ensure that they are included in the decision-making process? (250 word limit) If no low-income or minority communities, write N/A.

Minority and low-income neighborhoods and their residents are served the same as all other neighborhoods in the City. Residents are welcome to participate in all public meetings for specific projects or to speak generally during the public comment period of the meeting agendas.

96d. Is there a dedicated funding source for implementation?

- Yes
- No

If yes, describe the funding source and designated amount (250 word limit)

The Public Works Department has a line item in the City's annual budget of between \$55,000 and \$70,000 to implement pedestrian and bicycle improvements. The City is dependent upon Federal and State funding for large scale, high cost pedestrian and bicycle projects. The bicycle wayfinding project design and construction (which will get underway this year) will be funded with annual City budget funds.

96e. What percentage of the current plan has been implemented?

25%

96f. Are you meeting annual target goals for implementation?

Yes

97. What local agencies have a bicycle master plans or similar section in another plans and transportation demand management documents?

- Transit agency
- School District
- Parks and Recreation
- Other

If other, please describe (100 word limit)

MetroPlan Orlando (MPO) has a bicycle and pedestrian master plan which is a component of the Long Range Transportation Plan.



98. What percentage of the total transportation budget – on average - was invested in bicycle projects in FY 2010-2014?

10%

98a. Do you allocate bicycle-related funding to low-income communities and minority communities?

Yes

No

No low-income or minority communities

If yes, please describe (250 word limit)

99. How is bicycle planning integrated with transit planning? If your community does not have a transit system, write N/A.

The regional transit system serving Winter Park is LYNX. All LYNX buses include bike racks, and LYNX is working on an initiative to expand the number of bus stops with bike racks through a grant application. Also, SunRail (commuter rail system) has a stop in downtown Winter Park. Bike racks are provided at the SunRail station and bikes are also allowed on the train. In addition, a current focus is providing enhanced bike and ped connectivity to the SunRail station. The St. Andrews Trail when complete (design to be initiated this year) will connect the Cady Way Trail and Ward Park to bus stops located along Aloma Ave. The first mile or the last mile of a commute can easily be served by bike before or after the transit commute.

100. How is bicycle planning integrated with affordable housing planning? If no affordable housing, write N/A.

In Winter Park, affordable housing is integrated into the citywide bicycle planning efforts.

101. How does your community collect information on bicycle usage?

Automated bicycle counters

Regular statistically valid community bicycle surveys

Travel diaries

Regular manual counts of bicyclists on trails

Regular manual counts of bicyclists on the road

Regular counts of parked bicycles at transit stations (if applicable)

Regular counts of parked bicycles at schools

Other

None

If other, please describe (100 word limit)

Winter Park is partnering with MetroPlan Orlando on two bicycle usage initiatives: 1. Automated bicycle counters will be available from MetroPlan for use at priority locations within the City. 2. MetroPlan has purchased data from Strava and has made that available to the City for planning and evaluation purposes. The City of Orlando will be sharing automated count data they collect with Winter Park. Current count locations include the Cady Way Trail and Lake Baldwin Trail, both of which have portions in Winter Park. Winter Park also collects event bike usage via bikes parked at racks and through the bike valet.

If known (based on your own data collection), what percentage of all utilitarian trips are made by bicycle? Please identify the source.

Not known

If known, how often do residents use a bicycle recreationally?

Not known

If known, what percentage of all bicycle trips are made by women?

Not known

If known, what percentage of children bike to school?

5% of elementary school students (no middle school in Winter Park, and HS students not tracked)

If known, what percentage of children commute to preschool/daycare by bike (e.g. in a bicycle child seat or bike trailer)?

Not known

Please describe any other relevant results and trends. (250 word limit)

102. According to the American Community Survey, what is the most current journey-to-work data for your community? TIP: Search for topic B08301 (Means of Transportation to Work) for your community on the American FactFinder website (Advanced Search). Choose the most recent data set available for your community. Divide total number of cyclists ("Bicycle") by total number of commuters ("Total") and multiply by 100. Repeat for pedestrians ("Walked") and transit users ("Public transportation [excluding taxicab]").

Bicycling (in %)

2.2%

Walking (in %)

2.2%

Transit (in %)

1.4%

103. Does your community establish target goals for bicycle use, e.g. a certain level of bicycle mode share?

Yes

No

If yes, please describe (250 word limit)

104. Does your community routinely conduct pre/post evaluations of bicycle-related road projects?

Yes

No

If yes, please describe the results. (250 word limit)

105. Has your community conducted a network analysis to determine what percentage of bicycling trips can be done entirely on low-stress routes and to identify intersections and corridors that represent significant barriers?

GIS-based network analysis

Level of Traffic Stress analysis

Bicycle Level of Service for roads

Bicycle Level of Service for Intersections

Multi-modal Level of Service

Other

None

If other, describe (250 word limit)

MetroPlan Orlando has completed bicycle level of service and bicycle latent demand analysis for all arterial and collector roadways in the metro Orlando area including within the City of Winter Park - these analyses are components of the bicycle and pedestrian plan element of the Long Range Transportation Plan, and are used for general bicycle-related planning in the City.

106. How many cyclists have been involved in a crash in your community in the past five years involving a motor vehicle? If none, write 0.

46

106a. How many cyclist fatalities have occurred in your community in the past five years involving a motor vehicle? If none, write 0.

1

106b. Do you have a specific plan, policy or program to reduce these numbers?

Vision Zero policy

Towards Zero Deaths program or similar (A data-driven, interdisciplinary approach that targets areas for improvement and employs proven countermeasures, integrating application of education, enforcement, engineering, and emergency medical and trauma services.)

Traffic safety plan



- Other
 None

If other, please describe (250 word limit)

1) The City's Public Works and Planning Departments continue to plan and implement projects that are on the Pedestrian and Bicycle Connectivity Plan priority list to provide safer routes and accommodations for cyclists. 2) The Police Department continues to conduct activities as part of their FDOT Pedestrian and Bicycle Safety High Visibility Enforcement campaign. 3) The Walk and Roll program in Winter Park elementary schools (run by Healthy Central Florida / Healthy Winter Park) continues to provide education for elementary school students to instill safe bicycling practices at a young age. 4) A safe cycling training event at the Winter Park Public Library for seniors 55 and older (to be run by reThink) is planned for this October, and will help active seniors bicycle in Winter Park safely and confidently. 5) BikeWalk Central Florida is spearheading the Best Foot Forward (BFF) for Pedestrian Safety initiative, which Winter Park is a community partner in a regional coalition. BFF is a triple-E initiative with the specific goal is to reduce pedestrian fatalities by 50% in Central Florida over 5 years. While the initiative is primarily pedestrian-focused, the major enforcement component is focused on increasing yield rates at marked crosswalks, which may impact bicyclists in many instances. 6) The WPPD is providing reports of pedestrian and bicycle crashes to City staff and the Pedestrian and Bicycle Advisory Board for discussion at Board meetings concerning potential countermeasures and mitigation strategies.

107. Have you done an economic impact study on bicycling in your community?

- Yes
 No

If yes, describe the results. (250 word limit)

In 2011, the East Central Florida Regional Planning Council (ECFRPC) completed a study called, "Economic Impact Analysis of Orange County Trails". This study was undertaken to determine the economic impact of the Little Econ Greenway, West Orange and Cady Way Trails on Orange County's local economy (note that the a portion of Cady Way Trail traverses through Winter Park). The ECFRPC took surveys to collect data on the spending habits associated with using the Little Econ Greenway, West Orange and Cady Way Trails. The data was collected, analyzed, and split into different categories reflecting specific consumer spending and business sales. Based on the survey results, the average spending per trail user was \$20 per visit, representing food and beverages, transportation, books and maps, bike maintenance, rentals and more. In order to determine the economic impact of the three studied trails on Orange County's economy and Downtown Winter Garden, the ECFRPC utilized the Regional Economic Model, Inc. (REMI). In this analysis, the model was used to specifically look at business activities and consumer spending. Using the REMI model the study found that in 2010, the Little Econ Greenway, West Orange and Cady Way Trails in Orange County supported 516 jobs and had an estimated positive economic impact of \$42.6 million.

108. Describe any other programs or policies that your community uses to evaluate and/or plan bicycling conditions, programs, and facilities. (500 word limit)

Bicycle usage data from Strava is being promoted by both MetroPlan Orlando and FDOT, with purchased data being shared with municipalities including the City of Winter Park. Data will be used to verify roadways and linkages with high bicycle usage in order to justify bicycle-related enhancements to those corridors, ranging from signs and markings to more significant infrastructure such as separated facilities and traffic signal enhancements.

Final Overview

109. What are the three primary reasons your community deserves to be designated a Bicycle Friendly Community?

Reason One (250 word limit)

The City of Winter Park has always been shaped by transportation decisions. It was originally platted in 1881 with a grid network of streets and a train station in the center of a 10-acre park. The result of this effort created a sustainable village development pattern where pedestrians, cyclists, transit riders, and motorists are all partners in mobility and the streets are treated as an important element of the public realm, connecting neighborhoods, improving the city's aesthetics, providing economic value to the City, and allowing for healthy recreational activities. More recently, the implementation of SunRail provides an opportunity to strengthen bicycle connectivity to Winter Park's downtown SunRail station to enhance multi-modal travel. Winter Park deserves to be designated a BFC because today decision makers and residents recognize the significance of the early development patterns and the balanced transportation system. Decisions and policies are made that strengthen and enhance the earlier commitment to the balanced transportation system and cycling. Evidence of the City's successes with regard to cycling is the 2.2 percent bicycle ridership in the City versus the 1.2 percent ridership for the average Bronze BFC, and the 400 percent increase in ridership in the City since the year 2000. The City is committed through the use of the 5 E's, Engineering, Education, Enforcement, Encouragement, and Evaluation, to continuing to make Winter Park an attractive and safe place for bicyclists of all ages to ride whether for recreational or transportation purposes.

Reason Two (250 word limit)

The City of Winter Park deserves BFC designation because our City's Comprehensive Plan Transportation Element commits the City to be "bicycle-friendly." During the last City Comprehensive Plan update, the Comprehensive Plan Transportation Task Force, was appointed to outline and develop the specific mission of the Transportation Element. The adopted mission statement for the Transportation Element is: "Winter Park will continue to be a walkable, pedestrian and bicycle-friendly, sustainable, treed, relaxed, beautiful, safe, urban village that promotes neighborliness and courtesy among its citizens and visitors." The goals, policies, and objectives in the Transportation Element of the Comprehensive Plan commit the City to become a more bike friendly community. The commitment can be seen in the amount of progress made since Winter Park's last BFC application was submitted in 2008 and the fact that City leaders have mobilized on this issue. An example of Winter Park helping to lead on this issue not only within the boundaries of the City, but also in the regional conversation, is the BFC Workshop hosted in February. The workshop attracted more than 60 local changemakers, elected officials, transportation professionals, business leaders and bicyclists from numerous agencies and has helped catalyze the effort to make Central Florida more bicycle friendly, including an effort to establish a regional family friendly bicycle route map. Winter Park is also pushing to become more bicycle friendly by participating in the regional Complete Streets implementation effort being led by MetroPlan Orlando with one identified outcome to develop a Complete Streets project checklist.

Reason Three (250 word limit)

The City of Winter Park deserves BFC designation because it is actively implementing projects that support the City's efforts to become a more bicycle friendly community. Four projects that typify this are: (1) The Cady Way Cycle Track, a two-way protected bike lane which is currently under construction, will enhance connectivity to Brookshire Elementary School and Ward Park and encourage children and their parents to get active and bike to school and the park. This project was funded by a partnership of three, the City of Winter Park, the Winter Park Health Foundation, and Keep Winter Park Beautiful, all supporting safe cycling. (2) The Brookshire Elementary School Sidewalks, which is being funded by a SRTS grant from FDOT will begin construction in August. The project will provide new sidewalks on 3 streets near the school which will complete a network of connected sidewalks that improves walking safety and mobility for area residents, as well as will provide children a safe route to school instead of walking or bicycling in the street. (3) The St Andrews Trail, a planned 12-foot wide, 3500-foot long multiuse trail connecting Ward Park and the Cady Way Trail along St. Andrews Blvd to the commercial uses on Aloma Avenue, is proposed to enter its design phase within the next three months. (4) Denning Drive is programmed to receive \$613,000 in FY 2016 through the Winter Park Community Redevelopment Agency (CRA) for right-sizing, including incorporation of family friendly bicycle and pedestrian enhancements.

110. What are the three aspects of your community most in need of improvement in order to accommodate bicyclists?

Aspect One (100 word limit)

Wayfinding -- providing guidance to bicyclists as to the safest and most appropriate routes for riders of all ages, from 8 to 80. Addressing this issue is underway with the current bicycle wayfinding effort and regional family friendly bicycle route map.

Aspect Two (100 word limit)

Connectivity - connecting destinations and facilities to make travel by bike safe, convenient, and efficient. This is also being addressed in part through the bicycle wayfinding effort and regional family friendly bike route map. The family friendly bike route map project, in particular, will help identify deficiencies in a truly family friendly network, and highlight areas to focus future improvements on.

Aspect Three (100 word limit)

More safe bicycle infrastructure - with the focus on creating more family friendly bicycle route, it is acknowledged that more facilities that provide separation from motor vehicle traffic are needed which will help to encourage more people to get active and ride bikes. This effort is being addressed through projects like the Cady Way Cycle Track and the Denning Drive right-sizing. To this end, additional locations where separated infrastructure makes sense for implementation need to be identified and prioritized in the City's planning process.

111. Are you planning any new projects based on your completion of the Bicycle Friendly Community application?

- Yes
 No

If yes, describe (250 word limit)

"Through this application process, one identified need is to have better and more complete documentation and information related to existing bicycle infrastructure,



budgets, and the tracking of projects implemented. Getting information and data better organized is a priority for the City to assist with necessary documentation on future grant applications related to bicycle improvements. The City is also committing to working to provide and promote additional education and encouragement activities related to bicycling, such as partnering with reThink and Cycling Savvy on future safe cycling classes, and continuing to partner with Healthy Central Florida / Healthy Winter Park on events like the Bike to Work event, which is hoped to become a regularly scheduled event (perhaps quarterly). Finally, as noted in Question 19, the City has numerous projects that are currently underway or planned to be initiated this year, many of which are the direct result of this application process such as the City-wide bicycle wayfinding project, Cady Way cycle track, and implementation of bike share. The importance of these projects became more and more evident based on the focus of the application questions and the regional (and City) focus on family friendly bicycle routes and infrastructure.

We often get requests for model BFC applications from aspiring communities. Would you be willing to share your application?

Yes

How did you hear about the BFC program?

The BFC designation program was brought to the attention of the City's Pedestrian and Bicycle Advisory Board in 2008 by one of the board members. Based on this and the goal of the Advisory Board to make the City more bicycle-friendly, the City submitted an application in 2008.



Health Impact Assessment

City of Winter Park Bike-Sharing Program

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Planning Healthy
Communities

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Executive Summary

The City of Winter Park Transportation Advisory Board is seeking to implement a bike-share program within the immediate and outlying areas of Winter Park. The proposed program necessitated completion of a Health Impact Assessment (HIA) for recommendations in development and implementation. As a student project for Lisa Portelli's 2017 Planning for Healthy Communities course at the University of Central Florida, we conducted a rapid HIA utilizing six tasks:

1. Review of best practices.
2. Identification of research findings.
3. Explanation of the various business models.
4. Development of user profiles.
5. Evaluation of prospective bike-sharing stations.
6. Mitigating factors for integrating local programs into regional programs.

Prior to the detailed report, we provide a brief overview of the six tasks and recommendations.

Brief Detail

A comprehensive review of best practices was done on four small successful bike-sharing programs within the United States. The City of Madison, Wisconsin supports a population under 250,000 and a modest density of just over 3,000 people per square mile. Though relatively small, it boasts a thriving B-cycle bike-share program launched in 2011. The program, initially funded through a donation by Trek, recovers approximately 60 percent of its revenue through membership and user fees; this is 25 percent higher than the national average for transit systems. Sponsorships and donations account for the remaining approximate 40% (Christensen, 2013).

The second program is in the City of Chattanooga, Tennessee. This successful program launched via secured funding through the Lyndhurst Foundation in the amount of \$100,000 in 2009. They subsequently partnered with the local transit system, CARTA the following year while also receiving federal air-quality funds to jump-start the program. The city's Bicycle Transit System consists of 30 stations and 300 bikes dispersed around a 2.5-square mile area of downtown. In Spartanburg, South Carolina, Partners for Active Living (PAL) helped launch the Southeast's first bike-sharing system, Spartanburg B-cycle. Included in the initiative are 14 B-cycles at 2 B-stations, one at the Mary Black Foundation Rail Trail, and one at Morgan Square. Spartanburg B-cycle has proven to be an innovative, convenient tool encouraging physical activity among residents and visitors. The final program reviewed is in Boulder, Colorado. Listening to users' needs helped determine proper placement of stations and proved an important element to their success. Building on this communication, Boulder smartly placed a B-cycle system adjacent to a college community. As Kevin Crouse, the operations manager acknowledged, "An interested group of citizens first advocated for a modern bike-sharing system, forming a nonprofit organization to own and operate the system...and individuals in smaller cities usually have more influence" (Christensen, 2013).

Review of best practices and research findings demonstrate the significance bike-share programs contribute to building healthier communities. Bike-share represents an opportunity for people to incorporate active transportation into their daily lives, lower medical and health care costs, and provide connectivity to their neighborhood and surrounding areas. Studies show bicycling for 30 minutes a day (commuting daily for work via bike-share) can reduce the risk of heart disease by 82 percent and reduce the risk of diabetes up to 58 percent. Furthermore, in a recent study of the effects of bike-share on physical activity, 30 percent of respondents indicated

they lost weight utilizing a bike-share program (City of Wilmington Bike-share Feasibility Analysis, n.d.). The healthcare industry and federal government also recognize the health benefits of bike-share. For example, the Centers for Disease Control and Prevention (CDC), has actively funded several different systems in cities such as Boston and Nashville (Center for Disease Control, 2013).

This HIA explores and highlights the various business models associated with sustainable bike-sharing programs. The plan includes information about organizational structure (e.g., lead community/implementing agency, asset owner, stakeholders, etc.). It also provides data and information about the costs, operation models, timing, and implementation steps (Bike-share Business Plans, 2016). According to Alta Plan, using data from successful existing Bike-share Programs (BSP) can be a great strategy to estimate the system costs and exploring all potential revenues such as user fees or public-private funding (Bike-share Business Plans, 2016)

Development of user profiles is based on the City of Orlando's experience with a bike-sharing program. Downtown Orlando's Juice Bike-Share program services residents, ingoing and outgoing commuters, tourists, environmentally aware (green) residents, and Central Floridians attending a wide array of venues such as sporting events, concerts, and variety entertainment events. The bike-share program increases mobility in the urban core, connects to existing transit such as LYMMO and SunRail, and provides another affordable transportation option (Downtown Orlando, 2017). The City of Orlando recognizes the need to complement the LYMMO and SunRail systems with an additional service that will help accomplish the "last mile" connection to users' destinations. Design of the bike-share program is to provide users additional transportation options that are affordable and ecologically friendly. Orlando's Juice Bike-Share serves a similar population to Winter Park and serves as an excellent example.

Conducting an evaluation of prospective bike-sharing station sites in the City of Winter Park was essential for proper placement. Performing a walk audit and observing the busiest biking areas identified location needs for bike-share users within areas central to the Winter Park SunRail, Park Avenue, Winter Park Villages, and areas connecting with outlying stations and posted bike routes.

Lastly, we reviewed the challenges of successfully integrating local to regional programs. Studies of bike-sharing programs consider components such as employment density, resident density, visitor and recreational attractions, extensive transportation system, as well as clear pedestrian paths of travel. These attribute to long-term success within communities. Incorporating these features into a plan of local-to-regional assimilation will ensure a successful bike-share program that proves to be viable and sustainable.

Recommendations

The recommendation is to move forward with plans for a bike-share program in Winter Park with the following:

1. **Funding:** Funding for this program is possible through private and public sponsorships, federal grants, start-up monies from the City of Winter Park, and partnering with Juice Bikes of Orlando.
2. **Education and Buy-in:** Create user and community buy-in and momentum through informative flyers and community meetings.
3. **Continued Studies:** Obtain further studies to identify best street placement for bike lanes and signage.

4. Bike Station Placement: Placement of stations at the recommended sites, i.e. Cady Way Trail, Winter Park SunRail, and Winter Park Village.

Introduction

Bike-share programs are bringing a new vitality to cities across the country. Successful programs have shown a reduction in automobile use and, consequently, a decrease in congestion and emissions. They have also created healthier people and new bicycle enthusiasts. However, not all programs have been successful. It is therefore pertinent to study, plan, fund, implement, and continually evaluate such programs with great care. Questions to consider include:

1. Is this service needed?
2. What are our goals for this program?
3. Do we have the resources?
4. What target group do we wish to reach?
5. How is the program funded? (Sponsorship, City of Winter Park, private/public sponsorship).
6. How do we create a sustainable program?

Smaller cities and towns can find success with bike-sharing as it complements the public transit system and offers an environmentally friendly alternative for getting around. Bike-sharing can serve as a more efficient means of commuting “by providing more direct routes between destinations, as well as providing health benefits and cost savings” (Access, Number 47, Fall 2015).

In 2010, the City of Winter Park Pedestrian and Bicycle Advisory Board updated their Pedestrian and Bicycle Circulation Plan; updates include expansion of bicycle lanes and trails. With the growth of cycling and a goal of improving community health, the City of Winter Park

Transportation Advisory Board created a plan endorsing a bike-share program. As students of the University of Central Florida 2017 Planning for Healthy Communities course, we agreed to participate in the Winter Park Bike-Share project, utilizing health impact assessment tools.

Due to constraints including the relatively short interval to complete our research, the Transportation Advisory Board's available data, and the uniqueness of this project, we loosely fashioned this project around a rapid health impact assessment. As noted by Forsyth in *Design for Health HIA: Rapid HIA*, a rapid HIA brings together stakeholders to identify and assess health impacts. As such, we met with Mr. Wayne "Butch" Margraf, City of Winter Park Traffic Manager. Discussion ensued on the current state of the proposed bike-share program, information being sought by the Transportation Advisory Board, and pertinent data gathering and interpretation specific to the bike-share program prior to the Board meeting April 25, 2017, at 8:00 a.m. After the meeting, we agreed to perform the following:

1. Literature review of small city bike-share models' best practices.
2. Research supporting bike-share contributions fostering healthy communities.
3. Description of successful business models, i.e. self-sustainability, initial and continued low cost output, sponsorship, local business promotions/incentives for bike-share users.
4. Survey of target bike-share users (residents, tourists, and commuters utilizing SunRail) in Winter Park and Orlando to develop user profile.
5. A walk/bike audit of the City of Winter Park to determine potential bike-sharing stations.
6. Connectivity study to other Central Florida bike-share programs with planned future regional expansion.

HIA Tasks

Task 1: Review of Best Practices (Screening)

Recognizing each city has its own conditions, culture, and constraints, bike station placement varies. While one city may locate stations comfortably on its sidewalks, others find station placement better suited to the street. Technical criteria influence placement such as sidewalk widths, pedestrian volumes, location of fire hydrants, bus stops, and utilities (NACTO Bike-share Station Siting Guide, 2016). Political considerations and community desires also challenge placement. Though some station placement principles are universal, individual city rules and regulations vary, making it difficult to create and construct bike-share programs

Easy access and good visibility are paramount to success. Users will avoid bike-share stations located in poorly-lit locations or areas where they may feel unsafe. Stations that are hard to find, i.e. behind walls, buildings, or trees, discourage potential riders as well. Similarly, poorly placed stations may make it difficult to attract and retain sponsors and advertisers (NACTO, 2016). Additionally, station locations must be feasibly operational. For example, sun exposure if solar powered, proximity to power sources, and access points for maintenance and rebalancing bicycles. Stations must avoid locations that impede pedestrians or create conflicts with other major streetscape elements, e.g. bus stops, hydrants, and loading bays yet must be situated in the streetscape in a safe, desirable, easily found, aesthetically pleasing and user friendly manner. Main points of a successful bike sharing program include: accessible and convenient locations, prioritization of safety, conduciveness for operation, the enhancement of the pedestrian realm, and integration into the streetscape hierarchy.

Internationally, data demonstrates proximity to a network of high-quality bike lanes increases bike ridership. Moreover, this data substantiates that optimal station placement can

encourage new cyclists and increase the use of bike lanes, further justifying municipal investment in cycling. Bike-share is an additive mode of transit, complementing pre-established transportation systems. In cities with both high transit use and bike share, more than 50% of cyclists report frequently linking bike share with transit trips (NACTO, 2016). Placing bike-share stations in close, visual proximity to bus and train stops can broaden the reach of transit, solving some first/last mile dilemmas.

Bike-share station installation is possible on a wide variety of surfaces, from asphalt to cobblestones to permeable pavers. In general, stations should be located on hard surfaces that will not sink under the weight of the station or degrade or erode with heavy use. This will also ensure that rebalancing and maintenance vehicles can reach the station without damaging lawns or getting stuck in mud. Wayfinding and ad/sponsor panels are an important part of marketing and funding bike share systems. They can be standalone panels, or they can be integrated into the kiosk. Placement is typically at the ends of stations to maximize visibility (The NACTO Bike-share Siting Guide, 2016).

Economic benefits of bike-share programs are numerous. When compared with driving, bicycling increases exposure to storefronts, leading to increased retail spending. Bicycling facilities can increase home values and consequently add to municipal tax revenues. Healthcare cost reduction occurs from the increased physical activity of bicycling. Improved physical health leads to improved worker productivity. Investment in bicycle infrastructure creates nearly twice as many direct, indirect, and induced jobs per dollar than typical road projects. At the community level, bike sharing is the lowest cost-per-mile form of public transit (The Bike-Sharing Planning Guide, 2013).

While many of the United States largest cities have recently adopted bike share, several of the country's smaller cities began bike sharing much earlier. Small cities were responsible for much of the traction bike sharing gained, and have proven that bike share can succeed with little more than community support, good leadership, and effective partnerships.

Madison, Wisconsin, with a population under 250,000 and a modest density of just over 3,000 people per square mile, boasts a thriving B-cycle bike-share program that launched in 2011. The program, initially funded through a donation by Trek, recovers about 60 percent of its revenue through its membership and user fees - 25 percent higher than the national average for transit systems - and receives the rest of its money through sponsorships and donations. "We jumped from 470 members to over 2,000 between 2011 and 2012, over a 300 percent increase in membership", said Claire Hurley, the program's manager. Hurley attributes the growth primarily to a partnership made with the University of Wisconsin, a partnership that has been integral to the program's success (Christensen, 2013).

Similarly, in Chattanooga, Tennessee, the Chattanooga Bicycle Transit System (CBTS), operated by Alta Bicycle Share, has taken full advantage of its proximity to the University of Tennessee. According to Philip Pugliese, Chattanooga's bicycle coordinator and project director for CBTS, "the University is host to five stations in and around the campus and others subsidized memberships to students". There are, however, more stations in the city. Initial evaluations did not expect Chattanooga to be suitable for bike share, as it is a sprawling city, without a strong culture of cycling and walking. In addition, only a small percentage of area residents use transit, with most constituents preferring personal transportation, such as owned-automobiles. Despite the initial evaluations, local leaders continued to advocate for bike share. Eventually, the Chattanooga Bicycle Transit System was formed, claiming 30 stations and 300 bikes operable

around a 2.5-square mile area of downtown before New York or Chicago incorporated bike share into city transit. The purpose of bike-sharing was to place a large number of cyclists on the street in a short period, thus changing the dynamics of transit, limiting pollution, and improving population health through active transportation (Christensen, 2013).

Studying bike-sharing since 2007, Chattanooga bike-share supporters surveyed residents about their interest in cycling and if they had access to a bike. Approximately 75 percent of those surveyed reported some level of interest. The city secured \$100,000 in funding from the local Lyndhurst Foundation to launch the effort in 2009. They also partnered with the local transit system, CARTA then won federal air-quality funds the following year to jump-start the system (Christensen, 2013). It can be difficult to launch bike-share in a small city with a transportation system that is heavily reliant on car travel but Chattanooga's experience can offer insight and options to other small cities.

In its first six months of operation, the system has provided 12,600 rides. Together, riders burned more than one million calories. Furthermore, the combined bike trips have resulted in an approximate 8,100-pound reduction in emissions. The system will add four more stations in residential neighborhoods in the spring. To encourage ridership, the first hour of each trip is free. Equally impressive is Bike Chattanooga (as the system is informally known) has not yet attracted a major sponsor. Securing enough capital to keep a system going through the lean start-up years is important, especially in smaller markets where financial footing is not as strong as in larger cities (Chattanooga Bike-Share: Lessons for Smaller Cities).

Many other small cities are pursuing bike-share. Conference speakers reported that Bridgeport, Connecticut; Portland, Maine; and Fort Collins, Colorado are all interested in implementing bike-share programs. Panelists noted that Spartanburg, South Carolina (population

37,000), has a system with just two stations and 14 bikes (Chattanooga Bike-Share: Lessons for Smaller Cities).

In Spartanburg, Partners for Active Living (PAL) helped launch the Southeast's first bike-sharing system, Spartanburg B-cycle. The initiative includes 14 B-cycles at 2 B-stations, one at the Mary Black Foundation Rail Trail and the other at Morgan Square. Spartanburg B-cycle is an innovative, convenient tool that can help get residents and visitors, alike, more active. "We want physical activity to be as easy as possible in Spartanburg", said PAL executive director Laura Ringo. "We hope that the bicycles are used for trips around downtown and for recreation on the Rail Trail. In addition, we want to ensure that Spartanburg continues to be a leader as a bicycle-friendly community". The sharing process is simple, become a member to gain access to the red cruiser bikes. The program has three different membership types; annual, 30-day or 24-hour. The price of membership is \$30, \$15, and \$5, respectively. The first hour with each use is free. Each additional half-hour is \$1. Membership purchase is made with a credit card online or with a transaction at either of the kiosks. Annual and 30-day members will receive a B-card in the mail, reducing time spent checking out a bicycle to mere seconds for a more seamless transition. Bikes can be checked-out and returned at either location (Spartanburg B-cycle is the First Bike Sharing System in the Southeast, 2012).

In Boulder, CO, which has a B-cycle system adjacent to a college community. Operations manager, Kevin Crouse, pointed out individuals usually have more influence in smaller cities. "An interested group of citizens first advocated for a modern bike-sharing system, forming a nonprofit organization to own and operate the system", said Crouse. Additionally, as a benefit of being small, Crouse said they can "make decisions and implement them quickly...and we have the ability to interact very personally with our riders" (Christensen, 2013).

Why have small cities taken to bike-share? Bike-share is a low-cost solution for smaller cities to attract young talent and enhance their transportation network. In Chattanooga, Pugliese said that a “concerted effort was made to re-orient the community into one that was more environmentally friendly, sustainable, and attractive to both residents and future businesses”. As Phoenix, Arizona prepares to welcome its bike-share program later this year, Mayor Stanton said, “Bike-friendly cities are the ones that are going to advance in this new economy. If we want to attract and retain the right kind of jobs and entrepreneurs to our city, becoming more bikeable is critical” (MomentumMag.com, 2013).

Smaller cities certainly experience drawbacks, particularly pertaining to obtaining sponsorship and having a limited number of potential users. However, these cities have offsetting advantages. Madison, Boulder, and Chattanooga were able to quickly harness community support, build strong ties with city officials and local institutions, and launch successful programs. Small is efficient; small is beautiful (Bike Share Finds Success in Small Cities).

Task 2: Bike-Sharing Contributions to a Healthier Community (Scoping)

The health benefits of bicycling are well known in helping to address preventable diseases such as obesity, heart disease, and diabetes. Moreover, bike share can not only have a positive impact on physical health, but also mental health. People who bike regularly can live longer, evidenced in one study of prior Tour de France riders who on average lived to 81.5 years compared to the general population’s 73.5 years: a 17-percent increase (SweatScience.com, 2011). Another study suggested that even casual bike commuters benefit, estimating a gain of three to 14 months of life for individuals transitioning from car to bicycle. Studies from Purdue University in the United States show that regular cycling can cut the risk of heart disease by 50 percent (How Cycling Can Reduce Heart Disease, 2017). Additionally, according to the British

Heart Foundation, around 10,000 fatal heart attacks could be avoided each year if at risk populations were to exercise (BHF, 2015). In fact, cycling only 20 miles a week reduces the risk of heart disease to less than half that of those who take no exercise. Another study in *Medicine & Science in Sports & Exercise* spent five years looking at the activity of 1,500 subjects. Those who were active daily were 31-percent less likely to develop high blood pressure. Biking helps to recover from injury. Elderly patients with knee pain and osteoarthritis actually improved their condition when cycling was introduced to their routines, proving that as we get older, taking time to exercise. Even just spinning a few minutes a day is often of huge benefit (Hurford, 2016). A 2007 study conducted by Charles Hillman showed that exercise improved executive functioning and helped slow and deter Alzheimer's in the elderly (Science Daily, 2007). Also in 2007, Dr. Phil Tomporowski showed that kids benefit even more by cycling and that exercise can help control neurochemical disorders such as ADD. Studies have shown cycling as an effective way of losing and maintaining weight, thereby preventing and ameliorating chronic disease.

According to Stanford University School of Medicine, riding a bike helps those with sleep disorders. The researchers asked sedentary insomniacs to cycle for 20-30 minutes every other day. By the time of reevaluation by researchers, the time required for the insomniacs to fall asleep was reduced by half, and sleep time increased by almost an hour. Further research in cycling at Stanford also found that cycling regularly can protect skin against the harmful effects of UV radiation and reduce the signs of ageing; Harley Street dermatologist Dr. Christopher Rowland Payne explains: "Increased circulation through exercise delivers oxygen and nutrients to skin cells more effectively, while flushing harmful toxins out. Exercise also creates an ideal environment within the body to optimize collagen production, helping reduce the appearance of wrinkles and speed up the healing process" (Hurford, 2016). Lastly, experts from Bristol

University state biking improves gastrointestinal tract health and functioning. “Physical activity helps decrease the time it takes food to move through the large intestine, limiting the amount of water absorbed back into the body and leaving softer stools, which are easier to pass,” explains Harley Street gastroenterologist Dr. Ana Raimundo. In addition, aerobic exercise accelerates the breathing and heart rate, which helps to stimulate the contraction of intestinal muscles. “As well as preventing from feeling bloated, this helps protect against bowel cancer,” Dr. Raimundo says.

Knowing the health benefits of cycling, bike share presents an opportunity for people to incorporate physical activity which would be otherwise absent in their daily lives. Bicycling for 30 minutes a day, (in the form of using bike share to go to and from work each day), can reduce the risk of heart disease by 82 percent and reduce the risk of diabetes by up to 58 percent (WilmingtonDE.gov). Furthermore, in a recent study of the impacts of bike share on physical activity, 30 percent of respondents indicated a correlation of weight loss to using bike share. The health benefits of bike share are recognized by the healthcare industry and the federal government alike. For example, the Centers for Disease Control and Prevention (CDC), has funded several different systems including in Boston and Nashville (www.cdc.gov).

Bike share is not only a public initiative, however, with the private sector supporting many bike share projects throughout the country. The largest representation of private sector partnership and sponsorship is by healthcare providers such as Blue Cross Blue Shield (in Birmingham, Chicago, Minneapolis, and Philadelphia), and Kaiser Permanente (Denver B-Cycle) . As stated prior, daily cycling improves not only physical health, but psychological. These claims can be evidenced by users who have expressed that bike share has positively contributed to an improved outlook, increased recreation, and improved sociability. In fact, in a

recent study of Capital Bike-Share users, 31.5 percent of respondents reported stress reduction (City of Wilmington - Bike Share Feasibility Analysis).

Task 3: Business Models

A bike-share business model specifies the “asset ownership and revenue flow between the government and the operator”. The plan includes information about organizational structure (e.g., lead community/implementing agency, the operator who own the assets, etc.). It also provides data and information about the costs, operation models, timing, and implementation steps (Bike-share Business Plans, 2016). According to Alta Plan, using data from successful existing Bike-share Programs (BSP) can be a great strategy to estimate the system costs and exploring all potential revenues such as user fees or public-private funding (Bike-share Business Plans, 2016)

Since the City of Winter Park is in the process of implementing a BSP in the city, a detailed business model is not available yet. However, the city intends to collaborate with Juice Bike (this program already exists in the adjacent neighborhoods and can provide the opportunity for longer distance commutes) and ReThink Your Commute. Based on the available data on Juice Bike program, Juice Bike team comprises two organizations (CycleHop and Social Bicycles) that closely work with their five business partners. The team has three sponsors including OUC, Valencia College, and VHB. Juice Bike-share also offers 10% discount on some local bike shops with showing the membership card (Orlando Bike-share, n.d.).

To determine the applicable business model for the city of Winter Park BSP, it is necessary to provide some examples of business plans associated with sustainable BSPs (Table 1). Most of the BSPs in North America have a governance and organizational structure that address the needs of the local market, the municipal, and the funding environment (King County Bike-share Business Plan, 2012).

Table 1: Summary of U.S. bike-share business models

City	Program Names	Stations/Bikes	Operations	Ownership of Capital Infrastructure
Boston	Boston New Balance Hubway	60/610	Public – private partnership; operator direct contract with the City of Boston, other municipalities to contract directly with operator (RFP issued by regional planning agency).	City of Boston (government agency)
Denver	Denver B-Cycle	50 / 500	Non-profit set up by city.	Denver Bike Sharing (non-profit)
New York City	New York City Bike-share (2012 launch)	600 / 10,000	Completely private system; privately owned and operated.	Alta Bicycle Share (private company)
Des Moines	Des Moines B-Cycle	4 / 18	Already existing local non-profit (Des Moines Bicycle Collective).	Des Moines Bicycle Collective (non-profit)
Washington, D.C.	Capital Bike-Share	119 / 1,110	Operator direct contract with both Washington DC and Arlington County.	DDOT and Arlington County (government agencies)
San Antonio	San Antonio B-Cycle	14 / 140	Governed by non-profit set up by city – operated by bike rental company through tender.	San Antonio B-Cycle (non-profit)

Source: (King County Bike-share Business Plan, 2012)

Based on the analysis provided for the King County BSP, the “Administrative Non-Profit with a Private Operating Contractor” is the most appropriate model as it is more flexible, transparent, and secure. In this model, a non-profit organization, which is politically supported by municipalities, undertakes to fund the system, provides guidelines and equipment, chooses an

operator, and hires a private contractor to operate the system. It also takes the responsibility of marketing functions and deals with third parties (Administrative function) (King County Bike-share Business Plan, 2012).

It is also imperative to carefully review the factors associated with each plan and consider the city that is similar (e.g., size) to the city of Winter Park (Des Moines is the smallest city in table 1). College Park, MD is another small city with the bike-sharing program. The city is home to the University of Maryland and approached its BSP through a partnership with Zagster and Social Bikes (Vock, 2016). The city of Lakeland has also partnered with Zagster and approached BSP (Bike-share Program, n.d.). Zagster provides infrastructure, design, technology, implementation, and operations and has a flexible business model that uses some local sponsors to provide services for a larger area (Zagster, n.d.).

Task 4: Development of User Profiles

Nestled in the heart of Central Florida, Winter Park is a cornucopia of art, culture, local shops, education, and parks waiting to be explored. Important components of a bike-share program are the users and reasons for utilization. The implementation of a bike-share program with the City of Winter Park would complement SunRail, provide an alternative mode of transportation, reduce traffic and parking stress, as well as wear and tear on both driver and vehicle. Furthermore, the decrease in traffic load would lower exhaust emissions, be more environmentally friendly and promote a healthier lifestyle for its users. Treehugger.com recognizes the following benefits:

1. Cost effectiveness; cheaper than public transit.
2. Convenience; easier and faster to get around.
3. Enjoyment of cycling.

4. Health and environment friendly.



<https://www.itdp.org/release-of-the-bike-share-planning-guide/>

Source: (<https://www.treehugger.com/bikes/why-do-some-bike-share-systems-succeed-and-others-fail-bike-sharing-planning-guide-explains.html>)

Bike-share target groups consist of Winter Park residents, Rollins College students, commuters and locals employed in Winter Park, as well as tourists. A bike-share program can be an excellent opportunity for residents and visitors to experience Winter Park in a new way.

While bike-share programs have been fairly successful in cities like Orlando, it is essential to recognize they are exponentially larger in size, venue, residents and commuters. Smaller cities such as Winter Park are challenged in planning and implementation of a bike-share program due to their unique make-up and the desire to keep their small-town appeal. Alison Cohen, president and CEO of Bicycle Transit Systems, notes “that for smaller cities, it's unlikely that a bike-share system is going to replace the need to own a car. Rather, the bike-share system can be used as an alternative transportation option for people who might have used their cars during their lunch break or for short trips once they're already near a town center (crossroads.newsworks.org).

Amanda Day, executive director of the nonprofit Bike/Walk Central Florida states “Prior to initiation of the bike-share program casual biking in Orlando was pretty nonexistent, and

biking in Orlando was just two ends of the spectrum, die hard riders and kids biking to school” (Getting Around, 2017). Post bike-share implementation, research of Orlando bike riders reveals a diverse group of bike riders. This includes daily commuters (for school and work), local visitors coming into Orlando for an event such as the Fringe Festival or Orlando City Soccer Club, an event in which 40 people came on bikes through the bike-share program (Getting Around, 2017); casual cyclists, tourists, and locals, such as Nate Ritter, running errands. When interviewed by Orlando Magazine in 2016, Nate Ritter’s family moved to downtown Orlando and sold one of their two cars, choosing to make shorter trips using a new option: bike sharing on a bright orange three-speed. Another bike-share user, Jorge Barrios, a transportation engineer, Orlando resident commented in Getting Around, “I use it maybe three or four times a week. I even have my own bike, but sometimes, I find the convenience worth it.”

Downtown Orlando’s Juice Bike program increases mobility in the urban core, connects to existing transit such as LYMMO and SunRail and provides another affordable transportation option (Downtown Orlando, 2017). The City of Orlando recognizes the need to complement the LYMMO and SunRail systems with an additional service that will help accomplish the “last mile” connection to users’ destinations. The Bike-share Program is designed to provide citizens, tourists, and commuters with an additional transportation option that is affordable and ecologically friendly. The bike-share program in Winter Park would serve similar needs and interests, providing bike-share users with a healthier and less expensive option. Having identified potential bike-share users, the next phase focuses on placement of bike-share stations.

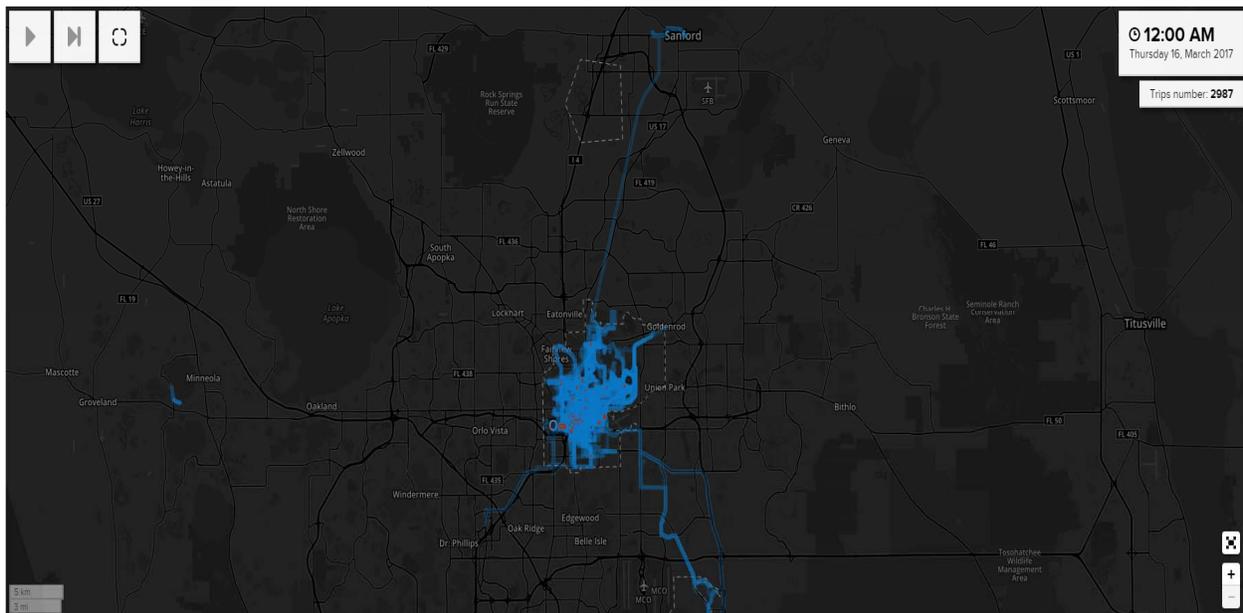
Task 5: Evaluation of Potential Bike-Share Stations

Surveys of those commuting on SunRail to Winter Park were conducted and their willingness to utilize bike-share measured. After compiling and assessing the results this data will be presented to the Winter Park Transportation Advisory Board.

A walk audit was performed utilizing maps provided by the City of Winter Park. As part of the evaluation for possible bike-share stations, we reviewed a heat map, as well as maps of Cady Way Trail and the pedestrian-bicycle connectivity plan. We also reviewed a map of Orlando's bike-share station placement.

Bike-share Stations in Orlando

Source: <https://cityofwinterpark.org/docs/pdf>



As noted on Orlando's bike station map, bike-share stations are “clustered around downtown” to meet the needs of its commuters (Downtown Orlando, 2016). They also have stations located just on the boundary of Winter Park and the fairly new Lake Nona. Riders most frequently start and end their rides at either the Church and Orange Street station or Lake Eola on Central Boulevard, according to Juice Bike data (Downtown Orlando, 2016).

Gertrude's Walk	Lake Eola	OUC
Sky House	Amelia Street	College Park

Source: <http://www.cityoforlando.net/transportation-planning/bikesharingfaq/>





<http://www.cityoforlando.net/transportation-planning/wp-content/uploads/sites/30/2014/11/NETTrail-Map.pdf>

Central to creating a successful bike-share program is choosing one people will use; therefore, bicycle stations need to be placed in close proximity to residential areas and relevant destination. Cohen states that "most bike-share systems work because you put a station or a bicycle within a five-minute walk of where people want to be," she says. "Once you get into less dense areas, people don't want to walk 15 minutes to get to a bike, to bike 20 minutes, and then walk another 15 minutes to get where they need to go" (crossroads.newsworks.org). Hence, for residents, it's most useful for those who have a

station close to home and close to work with gradual expansion and an end goal of replacing car trips with more bike trips.

To meet the demands of those utilizing bike-share, station placement needs to be based in areas of high density, i.e. Cady Way Trail, downtown Winter Park at the SunRail station and Winter Park Village at Demming. After establishing initial bike stations, it would be advisable to expand the program with two more stations possibly placed near Florida Hospital Winter Park and the intersection of Orange Avenue and Demming. These five areas will provide coverage within the immediate Winter Park area as well as connect with other outlying stations in Orlando and Lake Nona with the potential to connect the City of Winter Park regionally (please refer to map on page 26).

Through careful planning and placement, bike-sharing can be a practical and sustainable element of Winter Park, serving its residents, commuters and tourists as a positive, environmentally friendly, and healthier alternative as a means of travel.

Recommended Winter Park Bike-share Stations



Source: <https://cityofwinterpark.org/docs>

Recommended:

Cady Way Trail
 Winter Park Village/Winter Park Tec
 Downtown Winter Park SunRail Station

Potential Future Stations:

Aloma and Lakemont near FH Winter Park
 Orange Avenue and Demming

Task 6: Steps to Establish an Effective Regional Program (Evaluation)

To have a successful BSP, it is important to consider factors that will ensure success both the local and regional levels. BSP studies suggest the following factors be considered: a) employment densities, b) visitor and recreational attractions, c) extensive transportation system, d) clear pedestrian paths of travel, etc. Focusing on initiatives based on the above factors will assist communities in long-term success. Hubway in Boston serves as a solid example of a well-designed system with “appropriate locations along the street with narrow sidewalks” (Alta Planning+Design, n.d.).

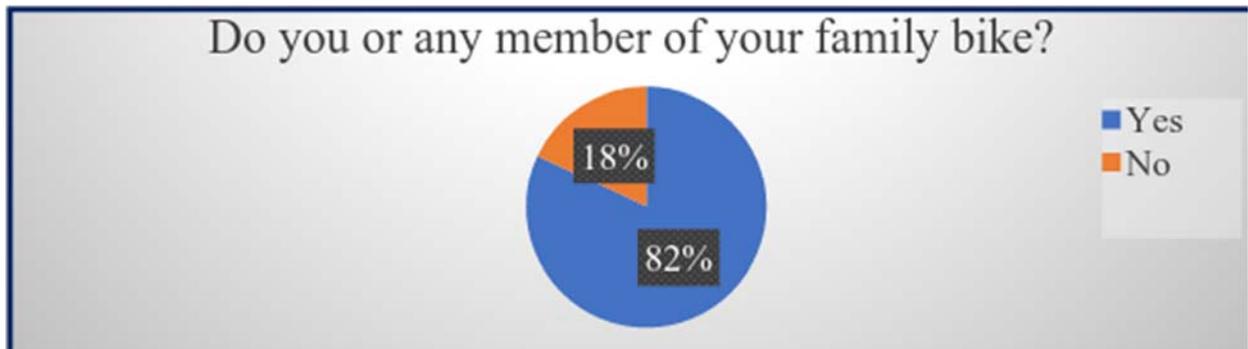
Also, to determine the feasibility of a bike-sharing program in the City of Winter Park, information was gathered through a 6-question survey. Some questions were based on a survey performed by the Bike-Share Philadelphia Prospective User Survey Fall (www.surveymonkey.com/r/JVMNQHK). Bike-share defines users as 18 years and older so the survey pool consisted of 50 adults within Winter Park. The survey was conducted in different locations throughout Winter Park (SunRail and Park Ave). In general, most people were thrilled with the idea of a bike-share program in the city. They expressed that “the only thing missing in Winter Park is a bike rental”. There were some comments; especially from those who believed bike-sharing would not be a fit for the city milieu, that a bike-sharing program may not be a practical approach.

On the charts below, chart 2 shows that 82% are willing to use a generic bike-sharing program while 18% prefer not to. Chart 3 is inclusive of the City of Winter Park and results indicate 6% of people (from 18% to 24%) are in favor of bike-sharing program, but they will not use the program because it is in the City of Winter Park. Main thoughts and concerns were regarding the safety of bike users due to the limited sidewalks and commercial land uses that

make the city more pedestrian-friendly than bike-friendly. Also, the results of the survey revealed that the main purpose for biking within city limits is recreational and the cost of \$3 to \$4 for single one-time use to get from one station to another prohibitive.

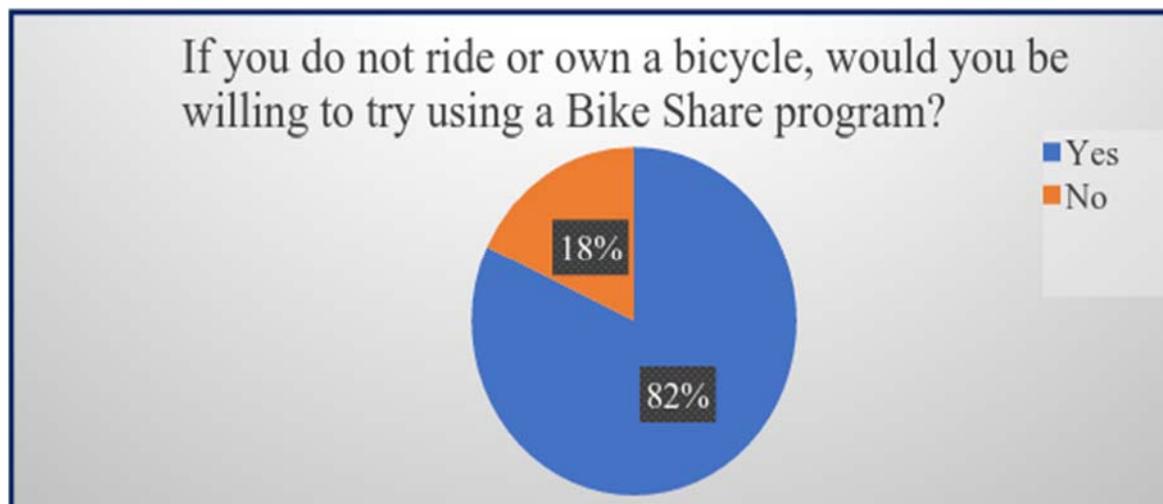
Information obtained from Juice Bikes indicates the initial cost of each bicycle is approximately \$1400. We proposed 5 bikes at each station (3 stations) which would cost overall \$28,000 for four stations (cost of bikes only). Since Juice Bikes requires sponsors to increase its stations it is necessary to seek sponsorship to establish the first three Winter Park bike-share stations.

Evaluation of surveys reveals the biggest concern is about site placement and condition. Thus, it is necessary to consider and apply design principles that improve the safety of bike-share users (e.g., Complete Street Strategy). For this reason, the city should designate bike routes to increase accessibility and move bike-share users between four proposed bike-sharing stations. Future promotion is based upon user willingness to travel to other destinations. This will also require installation of additional bike drop off/ pick up stations. To raise awareness the city could consider hosting a Ciclovía event and market the plan to the public through signs, public meetings and newsletters as well as “siting potential station locations along key corridors, in safe, visible and popular destinations; and developing highly-graphic user-friendly maps and 3-D visualizations and mock-ups” (<http://altaplanning.com/services/bike-share/bike-share-site-planning-permitting/>).



Charts 1&2

	Yes	No
1. Do you or any member of your family bike?	41	9
Total	50	
	Yes	No
2. If you do not ride or own a bicycle, would you be willing to try it using a Bike Share program?	41	9
Total	50	



	Yes	No
3. Would you use Bike-Share if there was one in the City of Winter Park?	38	12
Total	50	



Chart 3

	2 to 4 minutes	5 to 10 minutes	10 to 20 minutes
4. How far are you willing to walk to the nearest Bike Share station?	13	30	7
Total	50		

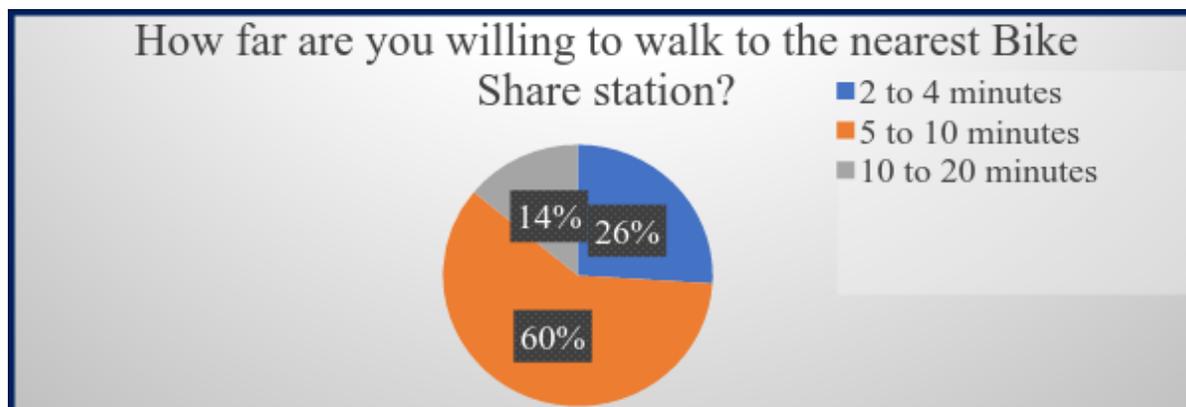


Chart 4

	Student, biking to class	Employee, biking to work	Recreational purpose	Bike to Exercise	Tourist, biking to tourism destinations	Not interested
5. Which best describes you and your reason for your interest in Bike Share?	4	4	21	9	3	9
Total	50					

Chart 5



	\$1 to \$2	\$3 to \$4	\$5 to \$6	\$6 to \$7	Not willing to participate in the bike-sharing program
6. How much are you willing to pay for a single one-time use to get from one station to another in the Bike Share program?	4	18	16	3	9
Total	50				

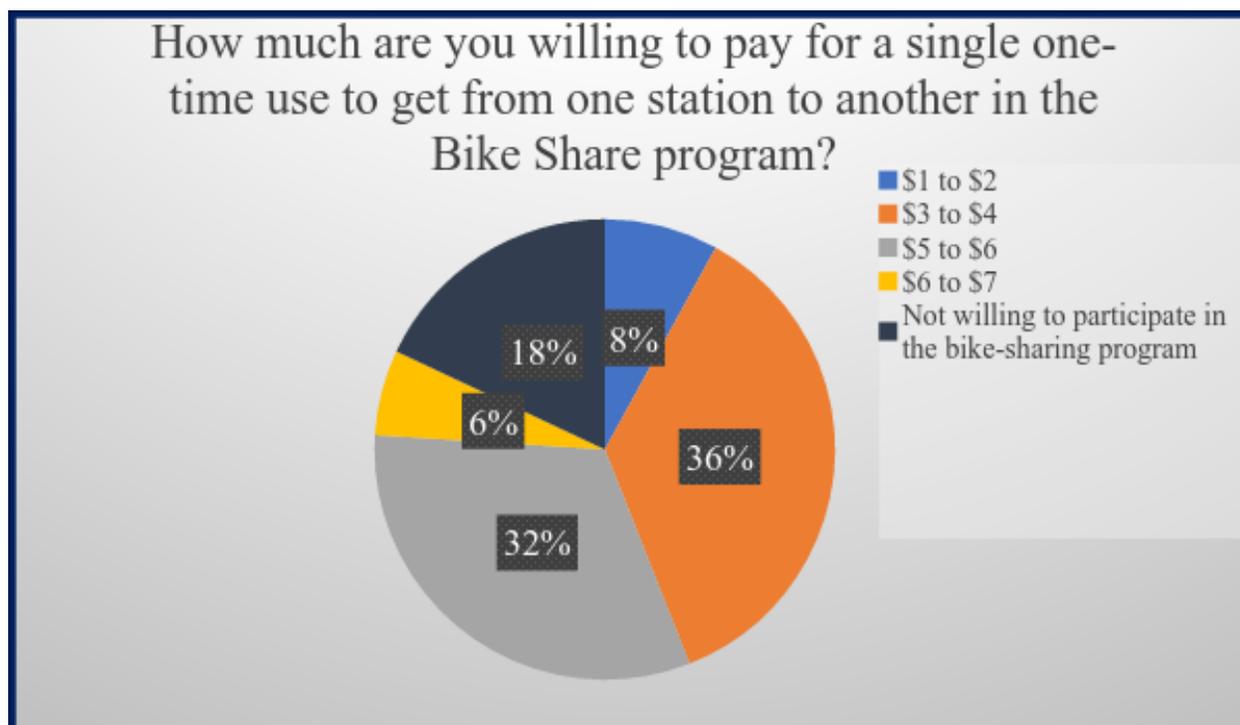


Chart 6

Conclusion

The initial research of bike-share programs globally has shown highly successful models in Europe and Asia. In the United States, most cities who have adopted various models of bike-share also continue with thriving programs. Encouraged by the reduction of traffic congestion, positive health results for citizens, and the ability to reduce car dependence, cities without seek implementation of bike-share programs.

Winter Park is a small historic city steeping in rich culture, the arts, a college, and quaint little stores, that is ready to proceed with a successful bike-share program. Apart from Park Avenue and Fairbanks, most roads throughout Winter Park are bike friendly. Matters to address moving forward include connectivity with bike-friendly routes, providing safe and secure areas in which to bike, and educating the public on the benefits of bike-share.

The City of Orlando has a proven business model with Juice Bikes, which can be implemented in Winter Park. This business model already boasts 10,726 members since 2015 and continue to report current regular active members of 9,566. Juice Bikes is meeting the demand for bike-share in Orlando and some surrounding areas such as Lake Nona. Expanding the program into Winter Park would benefit both cities, Orlando and Winter Park, and provide users the opportunity to utilize a healthier and environmentally friendly mode of transit.

References

- Alta Planning+Design. (n.d.). Bicycle Share Planning Studies (Publication). Retrieved from http://altaplanning.com/wp-content/uploads/Alta_BikeShare-Planning-Studies_QUALS.pdf
- Alter, L. (2013, December 5). Why do some bike-share systems succeed and others fail? The bike-sharing planning guide explains. Retrieved from <http://www.treehugger.com/bikes/why-do-some-bike-share-systems-succeed-and-others-fail-bike-sharing-planning-guide-explains.html>
- Anderson, Michael, "Assumption Busters: 12 Facts About Race, Ethnicity, Income & Bicycling," People for Bikes, March 9, 2015. Accessed via:<http://www.peopleforbikes.org/blog/entry/assumption-busters-surprising-facts-about-ethnicity-race-income-bicycles>
- Bike-share implementation strategies: a comparative guide. 2016 February. Retrieved from <http://www.onbikeshare.com/PDF/Bike%20Share%20Implementation%20Strategies.pdf>
- Bike-share Business Plans. (2016, October 13). Retrieved from <http://altaplanning.com/services/bike-share/bike-share-business-plans/>
- Bike-share Program. (n.d.). Retrieved from <https://www.lakelandgov.net/bike-share-program>
- Chattanooga Bike-Share: Lessons for Smaller Cities (2013, April 11) Retrieved from <http://usa.streetsblog.org/2013/02/11/chattanooga-bike-share-lessons-for-smaller-cities/>
- Christensen, Matt. "Bike-share Finds Success in Small Cities" (2013, September 23) Retrieved from <https://momentummag.com/bike-share-finds-success-in-small-cities/>
- Forsyth, A. (2011, July 31). Design for health HIA rapid HIA. Retrieved from <http://healthymetropolis.blogspot.com/2011/07/tools-what-is-rapid-hia.html>

Getting Around, 2017. Bike-Share. [Blog Post]. Retrieved from

<http://www.downtownorlando.com/getting-around/bike-share/#.WKplYjsrLb0>

Harrison_Modeling-BikeShare-Station-Activity.pdf & Peters, Jonathan & Adam Davidson,

NoraSantiago, “Don’t Curb Your Enthusiasm: The Economic Impacts of Transferring

Curb Space from Car Parking to Bike-share Docks,” CUNY/Transportation Alternatives,

November 2013. Accessed via: [http://nacto.org/wp-](http://nacto.org/wp-content/uploads/2015/12/2013_Peters-Davidson-and-Santiago_Economic-Impact-of-Transferring-Curba-Space-form-CarParking-to-Bike-ShareDocks.pdf)

[content/uploads/2015/12/2013_Peters-Davidson-and-Santiago_Economic-Impact-of-](http://nacto.org/wp-content/uploads/2015/12/2013_Peters-Davidson-and-Santiago_Economic-Impact-of-Transferring-Curba-Space-form-CarParking-to-Bike-ShareDocks.pdf)

[Transferring-Curba-Space-form-CarParking-to-Bike-ShareDocks.pdf](http://nacto.org/wp-content/uploads/2015/12/2013_Peters-Davidson-and-Santiago_Economic-Impact-of-Transferring-Curba-Space-form-CarParking-to-Bike-ShareDocks.pdf)

Henderson, C. (2016 January) Orlando Magazine. Pedal power. Retrieved from

<http://www.orlandomagazine.com/Orlando-Magazine/January-2016/Pedal-Power/>

Hurford, Molly. 8 Ways Cycling Will Make You Healthier (2016, May 25).

<http://www.bicycling.com/training/motivation/8-ways-cycling-will-make-you-healthier>

Ison, E. (2000) Resource for Health Impact. Vol. 1. NHS Executive London. Original source

–DETR (1999) A better quality of life. The Stationery Office, London. Retrieved from

<file:///C:/Users/The%20Mothership/Downloads/GuidetoRapidHIANottingham.pdf>

King County Bike-share Business Plan. (2012, January 27). Retrieved from

http://mobility-workspace.eu/wp-content/uploads/kcbs_business_plan_final.pdf

Maciag, Mike, “Pedestrians Dying at Disproportionate Rates in America’s Poorer

Neighborhoods.” Governing Magazine, August 2014. Accessed via:

[http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-](http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html)

[analysis.html](http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html)

Orlando Bike-share. (n.d.). Retrieved from <https://juicebikeshare.com/>

Peters, Jonathan & Adam Davidson, Nora Santiago, “Don’t Curb Your Enthusiasm: The

- Economic Impacts of Transferring Curb Space from Car Parking to Bike-share Docks,” CUNY/Transportation Alternatives, November 2013. Accessed via: http://nacto.org/wp-content/uploads/2015/12/2013_Peters-Davidson-and-Santiago_Economic-Impact-of-Transferring-Curba-Space-form-Car-Parking-to-Bike-ShareDocks.pdf & Clifton, Kelly & Sara Morrissey, Chloe Ritter, “Business Cycles: Catering to the Bicycling Market,” TR News 280, May-June 2012, pp. 26-32. Accessed via: http://kellyjclifton.com/Research/EconImpactsofBicycling/TRN_280_CliftonMorrissey&Ritter_pp26-32.pdf
- Spartanburg B-cycle is the First Bike Sharing System in the Southeast (April 15, 2012) Retrieved from http://www.visitspartanburg.com/scvb_blog/spartanburg-b-cycle-is-the-first-bike-sharing-system-in-the-southeast
- University of Minnesota. 2008 January. Retrieved from http://designforhealth.net/wp-content/uploads/2012/12/BCBS_Rapidassessment_011608.pdf
- Vock, D. C. (2016, June 28). Bike-share Isn't Just for Big Cities. Retrieved from <http://www.governing.com/topics/transportation-infrastructure/gov-bike-share-isnt-just-for-big-cities.html>
- Wang, Xize & Greg Lindsey et al, “Modeling Bike-share Station Activity: The Effects of Nearby Businesses and Jobs on Trips to and From Stations.” 2012. Accessed via:http://nacto.org/wp-content/uploads/2015/12/2013_Wang-Lindsey-Schoner-and-Harrison_Modeling-BIkeShare-Station-Activity.pdf
- Zagster. (n.d.). Retrieved from <https://en.wikipedia.org/wiki/Zagster>

Websites:

<http://altaplanning.com/services/bike-share/bike-share-site-planning-permitting/>

<http://www.accessmagazine.org/articles/fall-2015/>

<https://www.bhf.org.uk/news-from-the-bhf/news-archive/2015/august/heart-attacks-kill-200-people-of-working-age-every-week>https://www.cdc.gov/pcd/issues/2013/12_0274.htm

<http://www.cityoforlando.net/transportation-planning/wp-content/uploads/sites/30/2014/11/NETrail-Map.pdf>

<http://www.cityoforlando.net/transportation-planning/bikesharingfaq/>

<https://cityofwinterpark.org/docs/residents/cycling-walking/helpful-maps-brochures/pedestrian-bicycle-connectivity-plan.pdf>

<https://cityofwinterpark.org/docs/residents/cycling-walking/2010-pedestrian-bicycle-circulation-plan.pdf>

<http://crossroads.newsworks.org/index.php/local/keystone-crossroads/81227-how-smaller-cities-should-think-differently-about-bike-share>

<https://www.itdp.org/release-of-the-bike-share-planning-guide/>

<https://www.lakelandgov.net/bike-share-program>

<https://nhcps.com/how-cycling-can-reduce-your-risk-of-coronary-heart-disease-by-50-percent/>

<https://www.sciencedaily.com/releases/2006/12/061219122200.htm>

<https://www.surveymonkey.com/r/JVMNQHK>

<https://www.treehugger.com/bikes/why-do-some-bike-share-systems-succeed-and-others-fail-bike-sharing-planning-guide-explains.html>

<https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/livable-sustainable-communities/fta-program-bicycle>

<https://www.wilmingtonde.gov/home/showdocument?id=574>